88

UNITED STATES TRADE

Performance in 1988

INCLUDING SPECIAL TOPICS:

U.S.-CANADA FREE TRADE AGREEMENT
IMPLICATIONS FOR U.S. INDUSTRY OF THE EUROPEAN COMMUNITY'S 1992 PROGRAM
CONTRIBUTION OF EXPORTS TO U.S. EMPLOYMENT
U.S. BUSINESS' NEED FOR URUGUAY ROUND DISCIPLINES ON INVESTMENT AND INTELLECTUAL PROPERTY
EXPORTS FROM DEBT-PROBLEM LDCs TO THE INDIVIDUAL WEST
STATE AND METROPOLITAN ORIGINS OF U.S. EXPORTS

U.S. DEPARTMENT OF COMMERCE
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U.S. DEPARTMENT OF COMMERCE
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Project Director: Lester A. Davis.
Principal writers: Lester A. Davis, Victoria L. Hatter, Jeffrey W. Lins, and Georg M. Mehl.
Special topic writers are identified before each topic.
Statistics: Victor Bailey, Lester Davis, Victoria Hatter, Vera Hartman, Harvey Schultz, and Joanne Tucker.
Graphics: Lester A. Davis and Dorothy A. Minor.
Stenographic support: Andree M. Turner.
General supervision was provided by Henry P. Misisco, Director, Office of Trade and Investment Analysis (OTIA), assisted by Jeffrey W. Lins, Deputy Director, OTIA, and Gary R. Teske, Director, Trade Research Division, OTIA.

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Questions about the content of this publication should be directed to the Office of Trade and Investment Analysis, Room H-2217, U.S. Department of Commerce, Washington, D.C. 20230. Phone: (202) 377-2456.

INTRODUCTION

This is the fifth annual report on U.S. trade performance by the International Trade Administration. It presents a comprehensive analysis of U.S. trade in 1988 and relates U.S. trade to global trade and investment flows. The report examines trade in merchandise, business services, and other current account components – the measure of the balance on all U.S. transactions with the rest of the world. The relation of export and import developments to U.S. international financial transactions also is described.

The United States experienced an improvement in its merchandise trade account in 1988. The trade deficit fell from $152.1 billion in 1987 to $119.8 billion in 1988. The record decline was due largely to a surge in U.S. merchandise exports which increased by 26.6 percent (versus 11.8 percent in 1987) to a record $321.8 billion. At the same time, imports grew only 8.7 percent in 1988 (versus 11.2 percent in 1987).

The improvement in the trade balance substantially boosted economic growth and employment in 1988. U.S. economic growth in 1988 was export led, with merchandise exports directly contributing 34 percent of total U.S. GNP growth and a near record increase in the number of jobs. These impressive figures showed that international trade was the most vigorous sector of the American economy in 1988.

The United States is the world's largest exporter and importer of both goods and services. We have a critical stake in the effective functioning of the international trading system. Our export sales are essential to pay for the goods and services we import, and workers benefit from exports through the revenues and jobs they create. Imports provide important inputs to U.S. industry and benefit U.S. consumers.

U.S. trade performance in the 1980s has generated intense public debate about the economic factors affecting the U.S. balance of trade, trade policies, and the institutions designed to deal with them. This attention reflects an increasing public awareness of the interdependence of our economy with the economies of other countries (both industrial and developing) and a concern over the effects of continued large trade imbalances on the U.S. economy. The focus on trade issues has led to a renewed commitment in the United States to improving our international competitiveness.

Much has been accomplished over the past several years to improve U.S. trade performance, both by the U.S. Government and by American business. In 1988, we saw the beginning of a correction in our trade imbalances of recent years. Our aim is to build on this improvement in the years ahead. Much remains to be done, while new challenges are appearing on the horizon.

The U.S. trade deficit is in part a macroeconomic phenomenon. The United States needs to make further progress in addressing the shortfall between domestic savings and investment. To this end, efforts to control federal spending and bring the federal budget into balance must be continued. In addition, the United States must explore ways to encourage private savings and domestic capital formation to complement efforts to eliminate the budget deficit.

Continued strength of U.S. exports will depend on preserving and improving U.S. access to foreign markets. A priority U.S. trade policy objective is a successful conclusion to the Uruguay Round of multilateral trade negotiations. Our efforts include expanding the scope of international trade rules to "new" areas such as intellectual property, services and investment. U.S. Government priorities also include working on successful implementation of the United States-Canada Free Trade Agreement, which came into effect at the beginning of 1989; efforts to ensure U.S. access to Western Europe's markets while the European Community attempts to unify its markets by 1992; and continuing our efforts to open the Japanese market. We will continue our aggressive use of bilateral and multilateral negotiations, GATT procedures, and U.S. trade laws to deal with the unfair trade practices of other countries to ensure that all trading nations play by the same rules.

At the same time, a major U.S. objective is the further strengthening of macroeconomic policy cooperation among the key trading nations to help increase trade flows and promote adjustment of trade and current account imbalances. The "Plaza Agreement" of 1985 marked the beginning of a concerted effort to strengthen macroeconomic coordination among major trading

nations. The success of this agreement acted as a catalyst in realigning exchange rates which, coupled with stronger economic growth abroad, has created increased export opportunities for U.S. firms. The sharp rise in U.S. exports in 1988 indicates that U.S. firms are taking advantage of the opportunities created by our international economic policy efforts.

Achievement of these objectives will continue the trend toward reducing the U.S. trade deficit. The road to deficit reduction, however, will not be easy.

Slowing economic growth abroad could harm U.S. export prospects. Strong foreign economic growth is essential for continued U.S. export gains. Finally, continuing debt problems are likely to hamper trade and growth prospects among many less developed countries. The Brady Plan provides a promising basis for dealing with the burden of high-debt developing countries.

Reduction of our trade deficit will become more and more difficult. As U.S. firms recapture increasing shares of domestic and foreign markets, an unfortunate result of this adjustment process could be increased protectionist pressures and bilateral tensions in world trade. This will pose a great challenge to the openness of the multilateral trading system.

The U.S. Government continues to be a willing and aggressive partner of American business to create the right environment for export expansion. The government primarily should serve as a catalyst for American industry, including small and medium-sized businesses, in dealing with foreign governments on trade matters. Most important, government should make certain it does not impede the efforts of our private sector in world markets.

In the end, it is up to American business to double and redouble its efforts – in innovation, investment, marketing, pricing, and quality--to expand exports. The government can work to knock down trade barriers in foreign countries that will give us expanded export opportunities, but we have to ensure that our products and services are competitive in order to capitalize on these opportunities. This is the responsibility of American business. The private sector must continue to do what other nations do and pull out all stops to win and maintain foreign customers.

This report provides a useful analysis of our trade situation and can increase our understanding of the problems facing the U.S. business community. Hopefully, the facts outlined will assist in the search for solutions.

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HIGHLIGHTS

This annual International Trade Administration report – the fifth in the series – reviews trade performance in U.S. goods and services in 1988 and relates U.S. trade to global trade and investment flows. The report describes the relative roles of U.S. merchandise (goods) trade, business services trade, investment income, and other components of the current account – the measure of the balance on all U.S. transactions with the rest of the world.

The following detailed examination shows that U.S. merchandise trade is the dominant factor in the growth of deficits in recent years in the U.S. current account, a major component of the U.S. balance of payments. Within merchandise trade, manufactures trade is identified as the principal component of those growing trade deficits though 1987 and was the major source of deficit reduction in 1988.

The U.S. trade deficit improved dramatically in 1988 – shrinking by 21.2 percent from a record $152.1 billion in 1987 to $119.8 billion in 1988 (with imports valued on customs basis). The primary factor in the deficit reduction was a surge in exports – a 26.6 percent growth in 1988.

U.S. exports and imports reached record levels, contributing to stronger world trade growth in 1988. The United States also continued to be the world's largest trading nation, nearly equal to West Germany in exports while leading the world in imports. The 1988 surge in U.S. exports resulted in an enlarged U.S. share of world exports, a turnaround from the previous slow but steady decline in U.S. export share. The U.S. export share rose from 10.2 percent in 1987 to 11.3 percent in 1988, while the U.S. share of world imports dropped from 16.4 to 15.6 percent.

In volume terms, U.S. exports grew much more rapidly than imports in 1988 for the second year in a row. The growth rate of export volume rose from 15.0 percent in 1987 to 21.9 percent in 1988, while the rate for imports rose from 4.2 percent to 7.0 percent. As a result, U.S. merchandise trade continued to increase its vital contribution to the U.S. economy.

U.S. economic growth in 1988 was export led, with merchandise exports directly contributing 34.3 percent of total U.S. GNP growth – a far larger-than-proportionate contribution to the vigor of the U.S. economy than their share of GNP. Export growth made a similar contribution to U.S. employment in 1988.

The U.S. merchandise trade balance improved with almost all of its trading partners and across almost all major product groups. The largest improvements were deficit reductions with Japan (down $4.2 billion), Mexico (down $3.1 billion), and West Germany (down $3.2 billion). The deficit with Taiwan dropped by $4.5 billion; however, $2.0 billion of this reduction was in nonmonetary gold bullion. The largest deficit rise was with Brazil (up $1.2 billion).

More than half of the 1988 U.S. trade deficit reduction was in the manufactures trade balance. (Manufactures had also accounted for most of the trade deficit deterioration during 1981-87.) The largest product balance improvements were a $3.9 billion reduction in the automotive products deficit and surplus increases in nonmonetary gold (up $3.7 billion), aircraft and related equipment (up $2.8 billion), and synthetic resins, rubber and plastics (up $1.3 billion). The largest product balance deterioration was a $1.4 billion deficit increase in iron and steel products.

The U.S. trade surplus in business services also significantly improved in 1988 – reaching $19.0 billion from a low of $3.4 billion in 1985. All major business services categories contributed to the $7.1 billion surplus increase in 1988.

The sharp 1988 improvement in the U.S. merchandise trade balance contributed to a major reduction in the U.S. current account deficit. However, there was a substantial decrease in U.S. net international income receipts in 1988. These net receipts dropped from $22.3 billion in 1987 to $2.2 billion in 1988. The virtual disappearance of the formerly positive balance on international income reflects the sharp rise in international income payments to foreigners produced by the record growth in the U.S. net international debt position.

Moreover, continued current account deficits, though smaller in 1988 than 1987, added over $100 billion to the already large U.S. international debt. U.S. international debt reached about $532 billion at year-end 1988.

The large 1988 trade deficit reduction mainly reflects the lagged benefits of the 1985-86 dollar depreciation for U.S. price competitiveness in the U.S. and foreign markets. This has encouraged U.S. industry to work vigorously to expand sales to foreign markets and meet competition in the domestic market and to increase efficiency and hold down inflation.

Continued strength of U.S. exports will depend on preserving and improving U.S. access to foreign markets. To this end, U.S. Government efforts include the United States-Canada Free Trade Agreement, which came into effect at the beginning of 1989, and also U.S. Government efforts to maintain U.S. access to Western Europe's markets while the European Community attempts to unify its markets by 1992. U.S. Government efforts are also continuing to deal with the large bilateral imbalances with Japan and the East Asian newly industialized countries (NICs).

The dominance of manufactures in U.S. trade and current account developments highlights the importance of maintaining and improving the competitiveness of the U.S. manufacturing sector. To continue improvement in the U.S. trade balance, a strongly growing, highly productive manufactures sector is needed to expand exports, offset imports and reduce the U.S. international debt, as well as to maintain the U.S. economic wealth and improve living standards.

This is the first report in this series that shows U.S. imports on a customs value basis rather than a cost-insurance-freight (c.i.f.) value basis, thus excluding the cost of international insurance and freight charges associated with those imports. This shift in basis was made so that the U.S. import data presented in this report would be consistent with data reported by the U.S. Bureau of the Census, which began with January 1989 reporting only on the customs value basis in its press releases and other printed publications.

1

U.S. TRADE IN PERSPECTIVE

World economic growth and trade expanded vigorously in 1988, with world trade expanding nearly twice as fast in 1988 as in 1987. The strong growth in foreign economic demand, including demand for imports, was a key factor in the large reduction in the U.S. merchandise trade deficit in 1988 from its 1987 peak.

The 1988 reduction in the U.S. merchandise trade deficit resulted from a surge in exports and slower import growth. Reflecting the U.S. export surge, the U.S. share of the world export market rose from 10.2 percent in 1987 to 11.3 percent in 1988, reversing a seven-year downward trend. Moreover, the U.S. trade deficit decreased in size relative to the size of the U.S. economy.

The complexity of this adjustment in the U.S. trade position is intertwined with the growing international interdependence of nations. This chapter describes the international economic setting in which U.S. international trade – the exchange of goods, services and technology – occurs and then illustrates the significance of trade to the U.S. economy.

Growing International Interdependence

International trade has become increasingly more important in determining the level of living standards around the world. With global advances in technology and industrialization, no single nation – no matter how large its population or vast its natural resources – can dominate all technologies and production of goods. Nations need access to each others' markets and technologies to achieve their full economic potential and optimum growth. Moreover, increasing the volume and efficiency of global production requires the unfettered mobility of financial capital among nations.

While the degree of dependence on trade varies among countries, every country has been increasingly affected by the policies and economic performance of others. Interdependence provides many benefits. Yet, it also imposes challenges to and obligations on individual nations. Growing interdependence constrains the ability of individual nations to control their own economic fortunes. What had been in the past purely domestic policy issues, such as inflation control and economic growth rates, are now often either strongly influenced by other nations or have important repercussions on them. The same interdependence that has made nation-states more affluent also has left them in some ways more vulnerable. Government actions to deal with domestic problems produce external effects; similarly, actions to contain the effects of external forces on the domestic economy frequently conflict with other domestic needs.

U.S. trade takes place under a series of bilateral and multilateral commercial, economic and technology agreements intended to optimize the benefits of that trade to all partners and inhibit extreme or aberrant domestic policy actions that might injure the rights and benefits of other trading partners. In recent years, the principal agreements over trade in goods have been those negotiated under the General Agreement on Tariffs and Trade (GATT). In addition, beginning in January 1989, trade between the United States and its largest trading partner, Canada, is governed by a bilateral free trade agreement. Trade between the members of the European Community (EC) has long been governed by a multilateral agreement and the EC is embarking on a program to achieve a single internal market by 1992. In addition, the industrial countries also operate under the aegis of the Organization for Economic Cooperation and Development (OECD) and under customs conventions, such as that governed by the Brussels Customs Cooperation Council.

While most of the agreements governing international commerce apply to trade in goods, a growing body of bilateral agreements apply to trade in business services, intellectual property, and technology. Efforts are under way to extend them multilaterally under the GATT. (For a discussion of trade in services, see Chapter 5 of this report, and for a discussion of efforts to extend coverage of the GATT to these areas, see the special topic on the Uruguay Round in the Appendix.)

Paralleling trade in goods are corresponding international flows of capital. However, in recent years international financial transactions directly related to trade payments have become relatively small compared to other international financial transactions – so-called

autonomous flows. The competitiveness of a country's domestic products is affected by large changes in exchange rates; yet in recent years, the changes in demand for, and supply of international finance needed to settle trade transactions have been swamped by these autonomous flows. As a result, the influence of autonomous capital flows on exchange rates has often had powerful effects on the price competitiveness of exports and imports. These capital flows – like trade in goods and services – take place within the framework of international arrangements, among which are those administered by the International Monetary Fund and the Bank for International Settlements.

Cause and effect relationships between trade and other economic forces have become more complex. In earlier years, it was accepted that trade flows largely determined capital flows and therefore exchange rate levels. More recently however, capital flows have very much been driven by forces other than trade. Capital flows and expectations on investment returns have largely determined exchange rate changes and real returns to capital. These capital flows, in turn, have been affected in recent years by international deregulation of financial markets, particularly in Japan, the United States, and Western Europe. International financial deregulation has greatly increased flows between countries. Moreover, the speed of these transactions has been dramatically accelerated by computerized networks that transmit transactions by satellites.

These huge and potentially volatile international capital movements seriously restrict the ability of governments to influence capital flows. The size of these capital movements can overwhelm government resources for entering financial markets, even governments acting in concert, to stabilize exchange rates.

Although policy-makers may find themselves with increasing international trade and investment responsibilities, they have found the application of conventional economic tools increasingly complex. No single country dominates or can set the course of world economic performance. Nevertheless, because the United States is the world's largest economy, trader, and recipient and holder of international investment, and has long been the major supplier of new technologies to the world, U.S. domestic economic performance and U.S. international trade and investment policies remain critically important to continued global economic expansion. For example, in recent years growing U.S. merchandise trade deficits have contributed greatly to the economic growth of Japan, Western Europe, and the East Asian newly industrialized countries (NICs), and have helped less developed countries (LDCs) generate increased export earnings to service their debts.

But the recent very large U.S. merchandise trade and current account deficits – and the corresponding large surpluses of Japan, West Germany, Taiwan and some other countries – are imbalances that cannot be sustained indefinitely. In an integrated global economy that has become highly dependent on the U.S. market, these imbalances are not just a U.S. problem, but a problem for every participant in the global trading system.

The narrowing of U.S. trade and current account deficits that must occur will significantly affect not just the United States but also the economies of other nations as well – particularly those with large trade surpluses. Achieving an orderly narrowing of those imbalances, while maintaining strong global economic growth, will require difficult actions not just by the United States, but also by those other countries. Thus, the years ahead will test the willingness of individual countries to pursue policies that fulfill their international obligations to support a mutually beneficial global growth of trade and the health of the international financial system.

Strong World Merchandise Trade Growth

World merchandise trade grew vigorously in 1988, rising 15 percent to a record $2.9 trillion (in current dollars) (Figure 1.1). Dollar measurements of world trade growth, however, are often distorted by fluctuations in the dollar exchange rate and variations in the extent of absorption or pass-through of its effects by exporters to importers. For example, other things equal, as the dollar declines relative to other currencies, the valuation of trade of other nations increases when translated to dollars. Thus, the decline of the dollar exchange rate since February 1985 against many other currencies provided an upward bias to the estimated dollar value of world trade since 1984, compared with its 1984 value when the dollar was at higher levels.

The estimated growth of world trade in volume terms also rose at a record rate in 1988. The OECD estimated that world trade volume increased sharply by 9 percent in 1988 from a 5.8 percent pace in 1987 (Figure 1.2).

Figure 1.1

World Merchandise & Business Services Exports, 1980-88

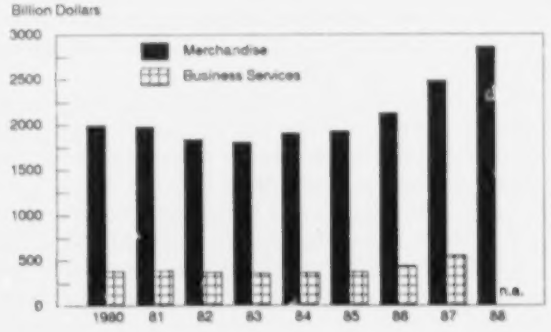
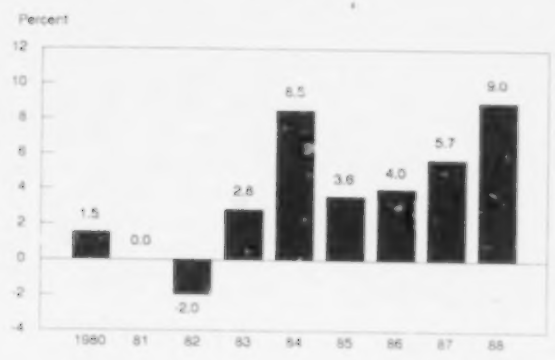


Figure 1.2

Change in World Merchandise Trade Volume, 1980-88



International Business Services Trade

World trade in business services, although only about one-fifth the size of world merchandise trade, is also a vital part of international commerce. Indeed, some business services transactions are directly and indirectly linked to merchandise trade. Trade in business services covers international exchanges of passenger and other travel and transportation services, reinsurance, communications, banking, film rentals, engineering design, copyrights, fees for use of patented technology, and various other tradeable services provided by businesses. Like trade in goods, international trade in services is estimated to have also grown strongly in 1988.[1] World business services trade reached $538 billion in 1987 (the most recent year for which relatively complete data are available).

The U.S. Role in World Trade

Effects on Foreign Economies

The United States continues to be the world's largest international trader, although over the long run its share of total world trade has continued to decline. In 1988 the U.S. import market was far larger than any other, while the United States tied West Germany as the leading exporter.

As in the case of world trade growth, estimates of U.S. world trade shares are biased by fluctuations in exchange rates. Other things equal, the appreciating dollar of earlier years tended to increase the U.S. share, while the post February 1985 dollar depreciation exerted an opposite effect. Furthermore, while share calculations denominated in any single currency in an era of widely fluctuating exchange rates may be indicative of relative trade performance valued in current dollars, those share calculations should not be viewed as even a crude indicator of volume performance.

Bearing these limitations in mind, the U.S. share of world exports persistently edged down from 11.9 percent in 1981 to 10.2 percent in 1987. However, in 1988 the U.S. share reversed that trend – sharply rising to 11.3 percent – mainly reflecting the large surge in U.S. exports (Figure 1.3).

Figure 1.3

U.S. Share of World Exports & Imports 1960-88

The U.S. share of world imports grew from 13.4 percent in 1981 to a 17.8 percent peak in 1985. Thereafter U.S. import growth slowed, reducing the U.S. share to 16.4 percent in 1987 and 15.6 percent in 1988. The decrease in the U.S. share of world imports since 1985 partly reflects the inflating effect of dollar depreciation on the dollar value of imports by a number of other major trading nations whose currencies appreciated against the dollar.

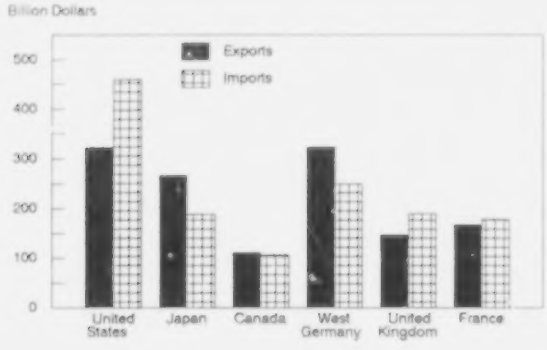
In 1988 West Germany's dollar-denominated share of world exports was 11.3 percent in 1988, substantially higher than the 1985 share of 9.6 percent; its imports share over the same period also was higher, 8.5 percent in 1988 compared with 7.8 percent. Japan's share of world exports was nearly the same in 1988 (9.3 percent) as in 1985 (9.1 percent), and Japan's 1988 import share (6.4 percent) barely exceeded its 1985 share (6.3 percent).

In dollar terms, 1988 U.S. merchandise exports of $322 billion virtually equalled West Germany's exports of $323 billion. In 1988, U.S. exports were 18 percent greater than Japan's exports of $265 billion. U.S. imports of $441 billion (based on customs value), however, exceeded West Germany's imports by 81 percent and Japan's by 168 percent (Figure 1.4).

[1] As defined in this report, business services trade excludes investment income – sometimes called factor income – which is the receipts and payments of interest, dividends, royalties, loan capital, etc. between multinational companies and their affiliates and between unaffiliated parties in different countries.

Figure 1.4

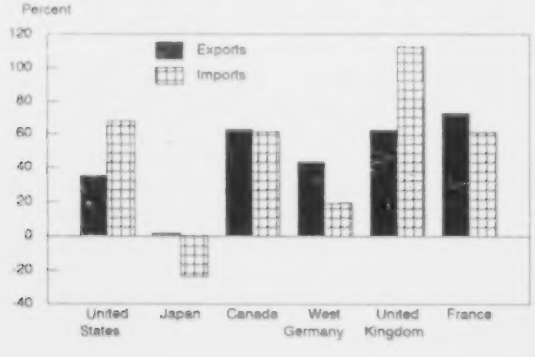
Merchandise Exports & Imports of Leading Trading Nations, 1988 (Exports f.o.b.; Imports c.i.f.)



Given the exchange rate effects on share measurements, examination of trends in local currencies provides some additional useful insights. In 1986, the dollar value of U.S. merchandise exports was still 5 percent below the earlier 1981 peak level, but in 1987 and again in 1988 U.S. exports surpassed that 1981 peak. Compared with 1981, U.S. exports in 1988 reached 35 percent higher while U.S. imports had grown by 69 percent (Figure 1.5). Measured in Deutsche marks, however, West Germany's exports over the same period grew 43 percent and its imports by 19 percent. In sharp contrast, the yen value of Japan's exports was only 1 percent higher in 1988 than in 1981. The lack of growth in Japan's yen denominated exports fails to reflect the rapid volume growth in its exports that is obscured by the large decline in Japan's export prices in yen terms. Japan's export prices in 1988 were about 25 percent lower than their 1980 peak and only about 10 percent higher than in 1970.

Figure 1.5

Change in Exports & Imports of Selected Countries, 1981-88 (In National Currencies)

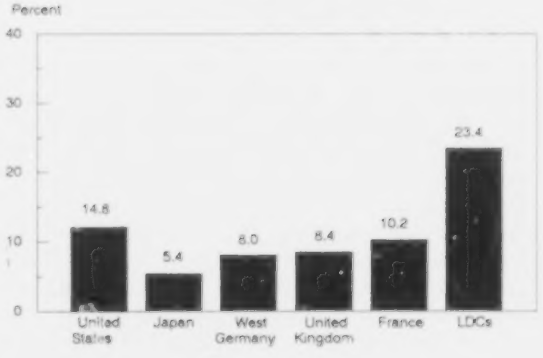


Japan's imports were 24 percent lower in 1988 than in 1981, a fall largely attributable to the sharp drop in oil prices and the effects on all import values of yen appreciation during 1985-87.

Based on dollar-denominated International Monetary Fund data, the U.S. share of free world business services exports in 1987 – the most recent data available – is slightly larger than the U.S. share of world merchandise exports (Figure 1.6). With a 14.8 percent share in 1987, the United States ranks first, followed by France (10.2 percent), United Kingdom (8.4 percent), and West Germany (8.0 percent). Japan's share is 5.4 percent. LDCs as a group accounted for about 23 percent of the 1987 total.

Figure 1.6

Share of World Business Services Exports, by Selected Countries, 1987

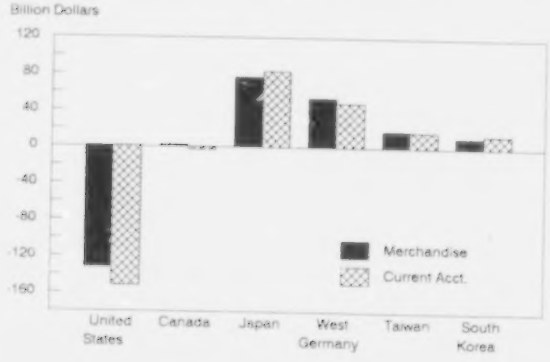


The very large U.S. share of world goods and services trade makes U.S. trade particularly important to the world economy. Changes in the U.S. economy – the world's largest and most open economy – and resulting changes in U.S. trade flows significantly affect the economic performance of other countries. A strong, growing U.S. economy increases U.S. imports, stimulating the economies of foreign suppliers. Weak U.S. economic performance, on the other hand, holds down U.S. demand and U.S. imports and may slow foreign growth.

The dollar exchange rate and other factors that affect U.S. price competitiveness also affect foreign competitors, not only in the U.S. market but also in their home markets and in third-country markets. Given the size of U.S. trade, large changes in U.S. current account and merchandise trade levels and balances can have especially important effects on other nations. Between 1981 and 1987, the $151.9 billion deterioration in the U.S. current account balance and the $131.5 billion worsening in the merchandise trade deficit (balance-of-payments basis) significantly enlarged the exports and improved

Figure 1.7

Changes in Merchandise Trade & Current Account Balances of Selected Countries, 1981-87 (Balance-of-Payments Basis)



the balances of U.S. trading partners and provided a powerful stimulus to their economies' output (Figure 1.7).

The improvement in the U.S. deficit in 1988 was substantial (Figure 1.8). The 12 percent ($17.2 billion) current account improvement and 20 percent ($32.3 billion) reduction in the merchandise trade deficit between 1987 and 1988 implies a corresponding reduction of trade surpluses or worsening of trade deficits of the major U.S trading partners. For example, the current account surpluses of Japan and Taiwan decreased by nearly $8 billion and the deficit of the United Kingdom increased by $21 billion. The impact on other countries' foreign trade balances of U.S. deficit reduction can also be seen in import growth rates. The OECD estimates that in 1988 total OECD imports rose at twice the pace of U.S. imports.

Large U.S. trade deficits have benefited both developed and developing countries. The strong U.S. economic expansion during the 1980s, combined with the growth of U.S.imports, played a major role in the recovery of the world economy from the global recession of 1982. U.S. import growth sparked economic growth in Japan, Europe, and the East-Asian NICs, which enabled the LDCs to generate higher exports necessary to service their debts. In effect, the United States was the major economic locomotive for the global economy. The steady growth in opportunities to sell in the U.S. market has enabled other nations to develop entire industries based on their exports to this market.

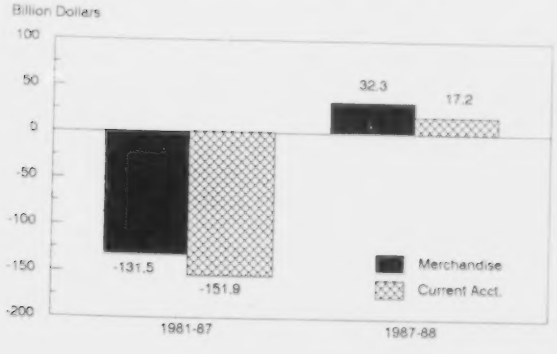
Illustrative of the significance of the U.S. market to other nations' economies, about one-half of the European Community's growth in 1984 was directly due to increased exports to the United States, about one-fifth in 1985 and one-twentieth in 1986.[2] Japan was also a major beneficiary – three-fourths of Japan's total growth in 1984, almost all in 1985 and nearly one-half in 1986.

U.S. imports continue to remain critical to a number of countries, including the Asian NICs and other less developed countries. Thirty-five percent of South Korea's and 39 percent of Taiwan's 1988 merchandise exports went to the United States.

In short, an increasing number of foreign countries have become highly dependent on the United States as a major target for fulfilling their export-led growth strategies.

Figure 1.8

Changes in U.S. Merchandise Trade & Current Account Balances, 1981-87 & 1987-88 (Balance-of-Payments Basis)



Importance of Trade to the U.S. Economy

In 1988 imports valued at $459.6 billion originated in almost all foreign countries. U.S. Customs processed over 12 million import documents, with transactions recorded in over 10,000 different commodity classifications. Major import items ranged from $47.0 billion in autos and $38.9 billion in crude and refined petroleum products down to relatively small categories such as $37 million of cigarettes and $63 million in spacecraft and parts.

U.S. goods exports of $321.8 billion were recorded in 4,500 different classifications in 1988. (Import classifications are more narrowly defined and therefore more numerous than export classifications.) Exports included not only large manufactures shipments – $19.4 billion of aircraft and parts, and $25.0 billion of office machinery and computers, but also smaller categories such as $101 million of sugar and $66 million of travel goods.

A broad comparison of the importance of merchandise exports and imports to the U.S. economy can be seen in the trends of the share of exports in the U.S. gross national product (GNP) and the share of imports in the

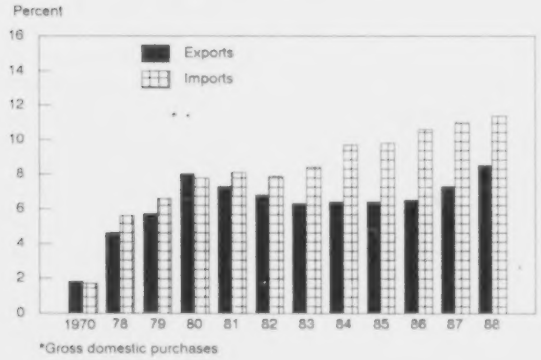
[2] The total stimulus to the foreign economy from increased exports to the United States during 1983-85 includes both the direct contribution of export growth to the foreign country's GNP growth and the substantial income multiplier effect of that growth. The estimated contribution does not include the whole multiplier effect produced by the 1984-85 export growth as that effect continued beyond 1985.

U.S. gross domestic purchases (GDP). For this purpose, imports are compared to GDP, rather than GNP, as imports are not a share of domestic output, but are a share of domestic purchases for consumption and investment.[3] Moreover, these shares over time are best compared in "real" terms (based on constant dollar values) in order to minimize distortions introduced by differences in inflation rates and exchange rate changes.

In recent years, the levels of U.S. real merchandise exports and imports have fluctuated widely relative to the size of the U.S. economy, reflecting changes in the mix of factors affecting the levels of domestic production, consumption, exports, and imports. From 1981 to 1986, first declining and then stagnant export volume reduced export's share of GNP. The 1983 export share of U.S. GNP (6.3 percent) marked the low point for this decade. Thereafter, the sharp increase in export volume in 1987 and again in 1988 sharply increased export's share of GNP to 7.4 percent and 8.6 percent respectively. The 1988 export surge was so strong that the 1988 export's share was boosted well above the 1980 prior share peak of 8.0 percent (Figure 1.9).

Figure 1.9

Shares of U.S. Real Merchandise Exports in GNP & Imports in GDP*, 1970 & 1978-88 (In Constant 1982 Dollars)



The U.S. merchandise import share of GDP for consumption and investment continued to grow after a 1982 pause, reaching 11.0 percent in 1987 and 11.4 percent in 1988, well above the 8.1 percent share in 1981. This import share rise reflects a fairly steady rise in imports' penetration of the domestic market. The record growth of imports in importance relative to the size of the U.S. economy through 1987 suggests that weak exports alone were not the key explanation of deficit growth through 1987. The high, growing import share of domestic purchases indicates that U.S. purchases of imported consumer and investment goods are as much a part of the U.S. trade deficit problem, and therefore of its solution, as the 1981-86 loss of export growth.

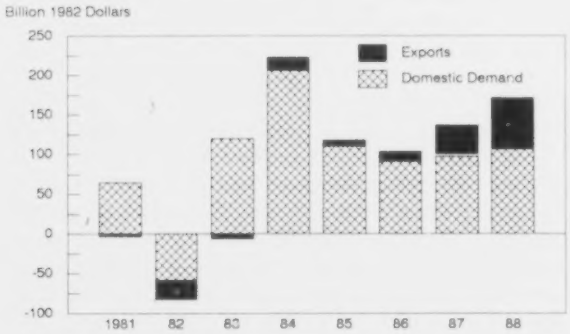
Contribution of Exports to U.S. GNP and Employment Growth

The resurgence in export volume since 1983 has been making an important contribution to the growth of the U.S. economy and civilian employment. U.S. export volume rose marginally faster than other U.S. GNP components between 1983 and 1986, and then in 1987 rose five times faster than the rest of the economy. As a result, beginning in 1984, exports started making a contribution to the growth of GNP proportionately greater than exports' share of GNP.

In 1987 and again in 1988 exports' share of GNP growth was far greater than proportionate. In 1987 exports were only 7.4 percent of GNP, but accounted for a four-times larger share – 29.3 percent – of GNP growth, not including any income multiplier effects (Figures 1.10 and 1.11). The 1988 export surge increased exports to 8.6 percent of GNP and directly contributed an even larger share – 34.4 percent – of GNP growth.

Figure 1.10

Real GNP Growth Contributed by Output for Exports & Domestic Demand, 1980-88

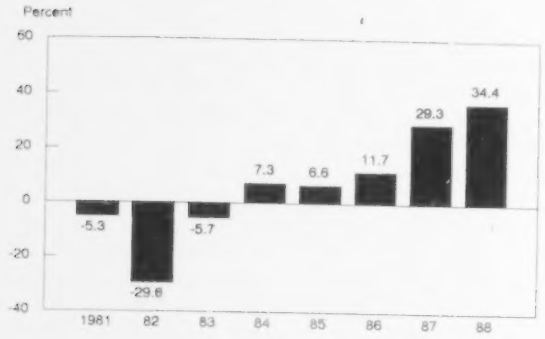


Beginning with 1986, export growth was sufficiently high to start making a significant positive contribution to U.S. employment growth. The 1987 export surge sharply increased the gain in export-related jobs and pushed the growth rate of export-related jobs higher than the growth rate of domestic-consumption related jobs. Moreover, the 1987 rise in export volume was so strong it made a much higher-than-proportionate contribution to U.S. employment growth. In 1987 export-related jobs accounted for only 6.2 percent of total U.S. civilian jobs,

[3] GNP, less exports of goods and services, plus imports of goods and services, equals GDP, in terms of national income and product accounting, under which services include international factor income and payments.

Figure 1.11

Export Share of Real GNP Growth, 1980-88 (In Constant 1982 Dollars)



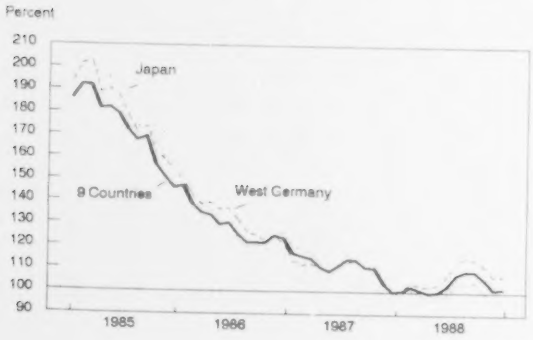
but accounted for more than twice as large a share – 15 percent – of total civilian employment growth. The 1988 export surge is expected to have substantially increased those ratios. (For more information on the contribution of exports to U.S. employment, see the special topic on the subject in the Appendix.)

Exchange Rate Developments

The dollar exchange rate vis-a-vis the currencies of most industrialized countries marginally appreciated during 1988. In particular, according to a bilateral trade-weighted index that measures dollar movements against the Japanese yen and the currencies of eight West European countries (Belgium, France, West Germany, Italy, the Netherlands, Sweden, Switzerland, and the United Kingdom), the dollar was 1.4 percent higher in December 1988 than in December 1987 (Figure 1.12). In inflation-adjusted terms, the increase was slightly higher, reflecting a moderately faster inflation rate in the United States than in Japan and Western Europe.[4]

Figure 1.12

Nominal Exchange Rate of the U.S. Dollar, Quarterly, 1985-88



Between 1985 and 1987, the dollar did not register a net gain in any year against any of these nine currencies. Indeed, the dollar fell sharply for almost three years, dropping by almost 44 percent, in both nominal and inflation-adjusted terms against the Japanese yen and the eight West European currencies from the February-March 1985 peak – through December 1987.

Nevertheless, although 1988 marked the termination of the steep prolonged decline of the dollar against these currencies, there were sizable fluctuations during the year. After minor swings in the first four months of 1988, the dollar rose rapidly by 10 percent from April into October, with much of the rise concentrated in June and July. Then during much of the final quarter, the dollar lost ground, falling by over 7 percent in October and November and showing little change in December. The dollar again reversed direction in 1989, moving sharply upward by over 10 percent through early June against the nine currencies.

The dollar's net gain in 1988 apparently stemmed from three factors: efforts by industrial countries to maintain dollar stability as reflected in central bank purchases of dollars when the dollar weakened or threaten to weaken, rapidly rising short-term U.S. interest rates, and perceptions in exchange markets that substantial progress at last was being made in reducing the U.S. trade deficit and that U.S. monetary authorities were committed to keeping inflation in check.

Spells of dollar weakness during 1988 with respect to the yen and West European currencies – such as occurred in the fourth quarter – were caused primarily by events that undermined confidence in the U.S. trade and economic outlook. For example, the dollar's tailspin in October appears to have been triggered by announcement of a larger-than-expected U.S. trade deficit for an earlier month.

There was one major exception to the general pattern of U.S. exchange rates with the industrialized world during 1988. From end-1987 to end-1988, the U.S. dollar depreciated from end-1987 to end-1988 against the currency of Canada – the largest U.S. trading partner – by 8.5 percent in nominal terms and slightly less in inflation-adjusted terms. However, the dollar during March 1985-December 1987 – in contrast to its pronounced descent vis-a-vis the yen and West European currencies – had fallen only marginally by 5.5 percent against the Canadian dollar.

The dollar also fell during 1988 against the currencies of the four East Asian NICs (Hong Kong, Singapore, South Korea, and Taiwan). The decline from end-1987 to end-1988 was 5.8 percent in nominal terms and slightly

[4] Greater foreign than U.S. inflation decreases the inflation-adjusted U.S. dollar exchange rate index – amounting to a drop in the dollar's value; lower foreign than U.S. inflation rates raise the dollar index.

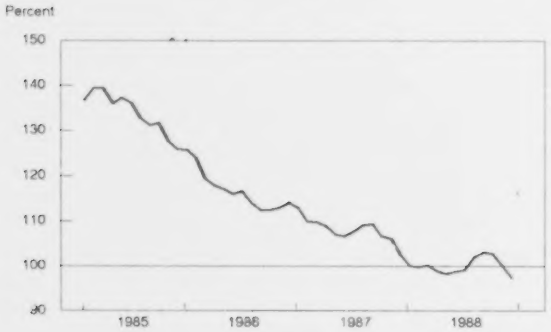
less in inflation-adjusted terms. The largest dollar-rate decrease was against the South Korean won – 13.8 percent. Against the new Taiwan dollar the U.S. dollar fell by only 2.8 percent, compared with a drop of 26.7 percent during March 1985-December 1987.

The movement of the four NIC currencies against the dollar and other currencies is largely governed by actions of monetary authorities in the four countries. The high degree of control exercised by these authorities is in sharp contrast to the dominance of market forces in determining dollar exchange rates with the other currencies of the industrial world.

On an inflation-adjusted basis against the currencies of 16 countries accounting for over 80 percent of U.S. manufactures trade during 1988 (eight West European countries, Japan, Canada, four Asian NICs, Mexico, and Brazil) the dollar during 1988 declined by 2.7 percent (Figure 1.13).[5] In contrast, the dollar had depreciated by 28.3 percent in inflation-adjusted terms against these 16 currencies from March 1985 to December 1987. Rapid rates of inflation in Brazil and Mexico, and consequent rapid offsetting depreciation of their currencies, render nominal exchange rate comparisons essentially meaningless. Thus, for these 16 countries only an inflation-adjusted index has been used.

Figure 1.13

Inflation-Adjusted Exchange Rates of the U.S. Dollar
Quarterly, 1985-88



As pointed out elsewhere in this report, the 1988 improvement in the U.S. trade deficit owes much to the large dollar depreciation from early 1985 through the end of 1987. The key question now is whether the small net appreciation in the dollar during 1988 – and its continuing appreciation through early June 1989 – will subsequently lead to a renewed widening of the deficit.

[5] The 1988 percent decline is based on December 1987 through November 1988 at an annual rate, as November is the last month for which inflation-adjusted data are availble.

(For further discussion of U.S. dollar exchange rates, see the special topic in the Appendix.)

Effects of Imports on the U.S. Economy

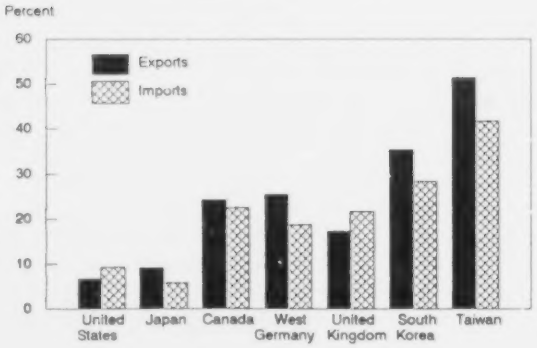
Increases in manufactures imports are highly visible and are usually seen as mainly competing with, rather than aiding, U.S production. Although there are no U.S. producers of a number of imported items, an estimated 70 percent of the U.S. manufactures imports compete with domestic production. Foreign goods available to U.S. consumers keep pressure on domestic producers of import-competing products to increase productivity, reduce costs, and maintain competitive prices. Imports stiffen resistance to inflationary wage and price increases, motivate cost-cutting measures in U.S. industry, and quicken the pace of adaptation and structural change within the domestic economy.

The U.S. economy's high degree of flexibility and responsiveness to change have aided its competitiveness, helping to create 15 million new jobs over the 1981-88 period. U.S. major trading partners had much less impressive job-creation records despite their trade surpluses. While the United States increased total civilian employment by 14.5 percent, Japan added 7.7 percent more jobs and Canada 11.2 percent more. West Germany and France actually decreased employment slightly, and other major West European employment performances were still far less than the U.S. increase.

Notwithstanding the increasing role of imports and exports in the U.S. economy, this role is even more important for many other industrialized and developing countries whose merchandise trade is much larger in relation to the size of their economies (Figure 1.14). Such foreign economies are much more affected by fluctuations in international trade levels and balances than the United States.

Figure 1.14

National Ratios of Merchandise Exports & Imports to GNP, 1988



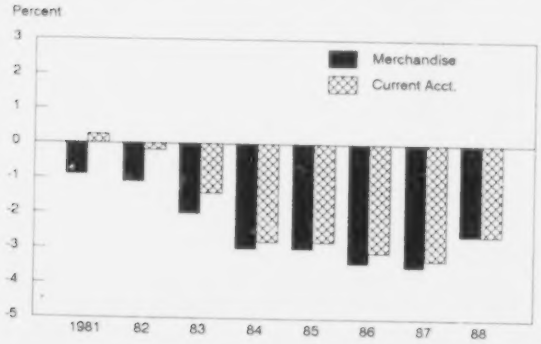
Effects of U.S. Trade Deficits

Changes in the size of global trade flows and current account balances among nations reflect changes in international economic conditions, in saving and investment rates, in national economic growth rates, new technologies, and changing national production capabilities. These changing trade flows produce deficits for some countries while offsetting surpluses for others.

While U.S. trade and current account deficits were not unusual in earlier years, between 1982 and 1987 both types of deficits persisted and grew very rapidly to the largest ever recorded by any country. In 1987 the ratio of the U.S. merchandise trade deficit to GNP expanded to 3.5 percent (balance-of-payments basis), and the ratio of the U.S. current account to GNP grew to 3.2 percent (Figure 1.15). Both ratios decreased sharply in 1988 to 2.6 percent. However, for the first time in a number of years, the ratio for the current account deficit equalled the ratio for the merchandise trade deficit, mainly due to the sharp reduction in the U.S. merchandise deficit and near elimination of previously large U.S. net international investment income receipts.

Figure 1.15

Ratios of U.S. Merchandise & Current Account Balances to GNP, 1981-88 (Balance-of-Payments Basis; Current Dollars)



The current account measures the balance of all of a nation's international transactions – goods and services trade, international investment payments and receipts, and unilateral transfers. Because of this broader coverage, the current account is an even more significant indicator of the condition of a nation's overall international economic performance than is the merchandise trade balance alone. For the United States, the current account deficit roughly equals the excess of domestic consumption of, and investment in, goods and services beyond what is domestically produced during a given year. The recent large U.S. current account deficits indicate that the United States is consuming and investing in much more goods and services than it is producing. The current account deficit also roughly equals the gap between earnings on output of goods and services (including exports) and expenditures on goods and services (including imports), and this gap – the savings gap – must be financed through borrowing from abroad.

Due to the persistent rapid rise in the U.S. current account deficit since 1981, the United States in 1985 became the world's largest international borrower, and that indebtedness has continued to grow. In 1988, even though the annual size of the current account deficit decreased by 12 percent, that smaller deficit still was very large ($126.5 billion) and still added to the U.S. debtor position. By definition, the U.S. international debt will continue to grow as long as the United States continues to run current account deficits.

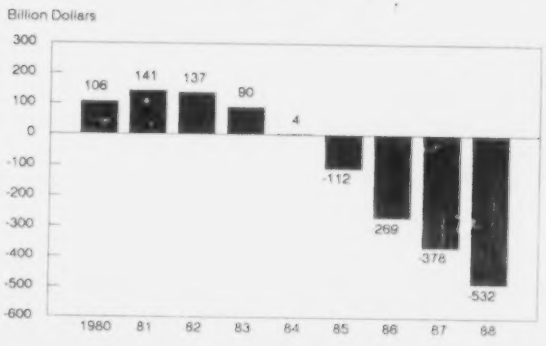
Effects of U.S. Borrowing From Abroad

The continuing large U.S. trade and current account deficits and the matching capital inflows have rapidly transformed the United States in seven years from the world's largest creditor nation in 1981, with a net positive international investment position of $141 billion, to the world's largest debtor nation at year-end 1988, with a net negative international investment position of about $532 billion – a negative swing of about $674 billion (Figure 1.16).[6]

Reflecting the effect of the U.S. swing into an international debtor position, the U.S. net international investment income flow fell rapidly from $22.3 billion in 1987 to $2.2 billion in 1988 and was actually negative in the second and third quarters for the first time in many years. On an annual basis, net income flows have not been negative since World War I. This negative shift in net

Figure 1.16

U.S. International Investment Position, Year-end 1980-88



[6] The net U.S. international investment position is the value of foreign assets owned by U.S. citizens less the value of U.S. assets owned by foreign citizens and is frequently referred to as the "creditor" (positive) or "debtor" (negative) position.

income flows reflects the rapid rise in foreign earnings on net foreign investment in the United States that resulted from the rapidly growing net capital inflows, that in turn correspond with the persistent large U.S. merchandise trade deficits (Figure 1.17).

The negative 1988 shift in net international investment income was sufficiently large to offset two-thirds of the reduction in the trade deficit. While the merchandise trade deficit dropped by $32.3 billion (on a balance-of-payments basis), net investment income dropped by $20.1 billion. As a result, the reduction in the current account was much smaller than the trade deficit reduction. The offsetting effect illustrates why any future reduction in the U.S. current account will require an even greater trade deficit reduction. For more on the current account deficit and net capital inflows, see Chapter 6.

Figure 1.17

U.S. Merchandise Deficit & Net International Investment Income Receipts, 1981-88 (Balance-of-Payments Basis)

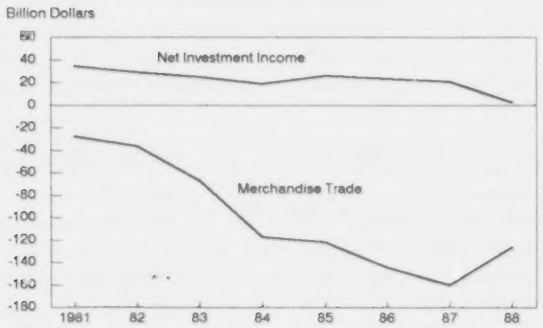


Figure 1.18

Ratios of Current Account Balances to GNP of Selected Countries 1986 & 1987

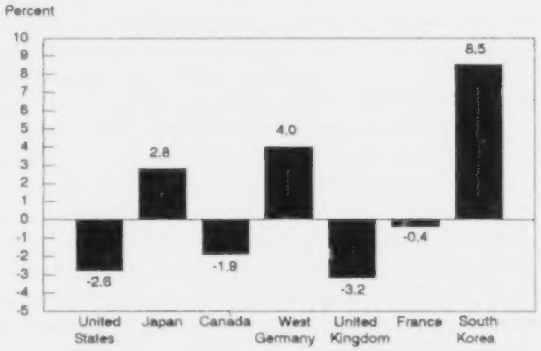
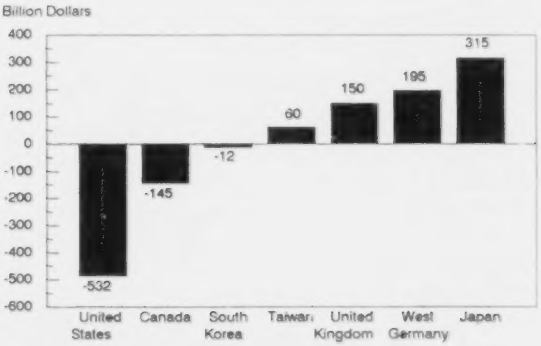


Figure 1.19

Estimated International Investment Position of Selected Countries, Year-end 1988



For every international borrower there are international creditors—Japan, West Germany, and Taiwan were among the largest net international lenders in 1988. The extent of annual lending by other countries is reflected in their current account surpluses. Japan's 1988 current account surplus was $79 billion (2.8 percent of GNP), and West Germany's $48 billion (4.0 percent of GNP). South Korea's and Taiwan's 1988 current account surplus were smaller in dollar terms, but represented a much larger share of GNP—both at 8.5 percent (Figure 1.18).

The counterparts to the rapid movement of the United States into a negative international investment position are dramatic increases in the creditor positions of other countries, particularly Japan (now the world's largest creditor nation), West Germany, the United Kingdom, and Taiwan (Figure 1.19).

An important factor relating to the effects of U.S. borrowing from abroad and the growing U.S. international debt position is the extent that the net U.S. capital inflow is used to enhance U.S. productive capacity and the international competitiveness of U.S.-produced goods and services. To the extent that capital inflows are used to create the additional production capacity and enhance competitiveness, those inflows may subsequently contribute to added production used for reducing the U.S. trade deficit. However, net borrowing devoted to consumption will only increase the difficulty of meeting long-term debt servicing requirements.

Long-Term Future Adjustments

A critical problem facing the international economy is that large U.S. national current account deficits and large foreign-country surpluses cannot be sustained indefinitely, and the longer they persist the greater likelihood they will impair the U.S. standard of living. Gradual, orderly adjustment, rather than a precipitous adjustment, of these imbalances can best be achieved in an environment of sustained U.S. and world economic

growth. Even if gradual, the resulting changes will affect exporting and import-competing industries in the United States and abroad, forcing significant industrial restructuring. Unfortunately, domestic resistance to structural change tends to increase pressures – both in the United States and abroad – for trade-restricting actions.

A preferred way of accomplishing the required trade shifts is a gradual reduction of U.S. needs for imported capital through reduced federal budget deficits, increased saving relative to consumption and investment, or both. This course of action would narrow and ultimately eliminate the U.S. savings gap. Eliminating this gap would allow the United States to satisfy its investment needs without a net inflow of imported capital and goods.

These steps, together with other measures aimed at improving the international competitiveness of U.S. firms – such as improved education and worker training, better development and implementation of process technologies, higher quality and productivity levels, market-opening efforts of the U.S. Government, and better marketing by U.S. companies – will allow U.S. producers to regain traditional U.S. domestic and foreign markets without undue pressure on the U.S. dollar exchange rates.

Foreign economies will also face significant adjustments as a result of their declining surpluses with the United States. Those foreign economies that have become reliant on ever-increasing export surpluses as a source of their economic growth will have to rely more on increased domestic demand as the source of future growth. The necessary structural changes will take time to implement if strong worldwide economic growth is to be maintained.

Summary

A dramatic improvement occurred in the U.S. trade performance in 1988. For the first time in several years, the merchandise trade balance improved, with the deficit shrinking by 20 percent ($32 billion). This was a major reversal in the previous worsening trend and a major step toward readjustment of U.S. merchandise trade and current account imbalances. The United States remained the world's largest trading nation – increasing its share of world exports to 11.3 percent, while the U.S. share of world imports declined to 13.4 percent, both reversals of their prior trends. This improvement in the competitiveness of U.S. goods in both U.S. domestic and foreign markets largely stemmed from improved price competitiveness made possible by the post-1985 devaluation of the U.S. dollar.

Even with this large merchandise trade improvement, the imbalance remained large and was only slightly offset by the substantial gain in the smaller business services trade surplus. Thus, the resultant current account deficit continued to add to the negative U.S. international investment position, to the continued need for large U.S. inflows of foreign capital, and to the rising international income payments to foreign investors.

The strong U.S. economic expansion during the 1980s, with strong domestic demand growth, resulted in rapid U.S. import growth, which in turn contributed to the recovery of the world economy from the global recession of 1982. The United States was a major economic locomotive for the global economy. This process began to reverse in 1987 and 1988 when the surge in U.S. exports demonstrated their importance to the U.S. economy and standard of living. U.S. exports in 1988 played a vital role in the U.S. economy, directly contributing over one-third of U.S. GNP growth – their highest share of U.S. economic activitiy in many years – and making a similar large contribution to U.S. employment growth. In 1988 U.S. economic growth truly became export led.

These U.S. trade gains are occurring in a world that has become increasingly economically interdependent and the cause and effect relationships between international trade, investment, and other economic forces have become more complex. Significant narrowing of the U.S. trade and current accounts affects not just the United States but also foreign economies, particularly those with large trade surpluses that have depended on exports rather than domestic demand for most of their economic growth. Thus, balanced strong world economic growth will be vital to continued improvement in the U.S. balance of trade.

2

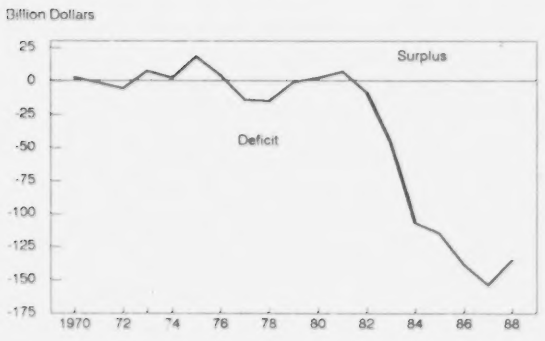
U.S. TRADE PERFORMANCE IN 1988

Composition of U.S. International Transactions

To better understand the effects of U.S. transactions with the rest of the world and the relative importance of the different categories of foreign trade, it is useful to examine the U.S. current account—the overall accounting of international financial flows associated mainly with transactions in goods, services, and income on investments. The U.S. current account registered relatively small imbalances (some small surpluses, some small deficits) over the 1970-82 period (Figure 2.1). A modest 1981 surplus ($8.2 billion) was followed by a small deficit ($7.0 billion) in 1982. Between 1982 and 1988, the deficit rapidly widened, reaching $133.2 billion in 1986 and peaking at $143.7 billion in 1987. In 1988 the current account deficit dropped by 12 percent to $126.5 billion.

Figure 2.1

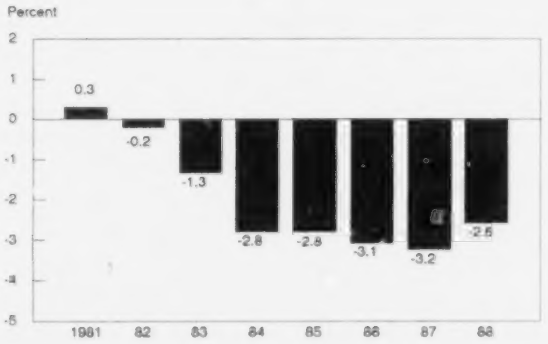
U.S. Current Account Balances, 1970-88



As in the case of a household, one measure of a nation's international indebtedness is the relative size of its annual debt compared to its annual earning power. In the case of a national economy, this is the ratio of the current account deficit to the total output of goods and services—the gross national product (GNP). As a result of the current account's recent rapid rise, it grew relative to the size of the GNP (in real terms) from near zero in 1982 to a peak of 3.4 percent 1987. Then in 1988 the trend reversed—the ratio dropped by one-fifth to 2.3 percent (Figure 2.2). This sharp decrease reflects an absolute drop in the deficit and strong economic growth at 3.9 percent in real terms.

Figure 2.2

Ratio of U.S. Current Account Balances to GNP, 1981-88



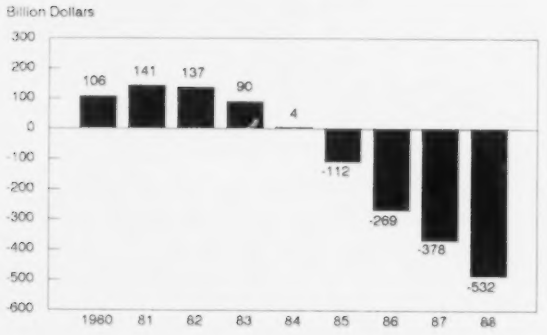
The current account deficit also is a measure of the extent that the sum of a nation's total consumption and investment exceeds its total national production in a given year. A current account deficit means a nation is producing less than it is consuming and investing, importing the difference, and borrowing abroad. (In contrast, a current account surplus means a nation is producing more than it is consuming and investing, exporting the difference, and lending abroad.) In essence, the U.S. current account deficits indicate that in 1986 and 1987 the United States annually consumed over 3.1 percent more goods and services than it produced and obtained the balance in the form of net imports of goods and services. This excess consumption was paid for with net borrowing from foreigners. In 1988 the U.S.

excess of consumption and investment over production of goods and services dropped to 2.8 percent.

The effect of a series of current account deficits – the excess of consumption and investment expenditures over production earnings – resulted in the United States falling increasingly into international debt. These accumulated debts are measured by this country's international debtor position. The financial mirror image of the cumulative goods and services deficit is roughly the U.S. international investment position – the excess of foreign-owned U.S. assets over U.S.-owned foreign assets. The recent large U.S. current account deficits have moved the United States from a peak creditor position in 1981 to a year-end 1988 negative international investment position of about $532 billion (Figure 2.3).

Figure 2.3

U.S. International Investment Position, Year-End 1980-88



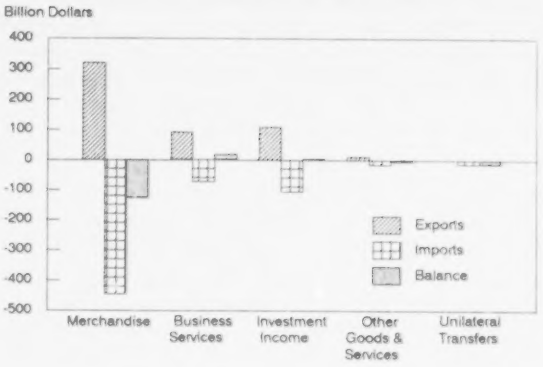
The relative size of the components of the current account shows where the recent deterioration in performance occurred and can provide insights into which components are capable of major future improvements. The current account groups international transactions into five broad categories: merchandise trade, business services trade, international investment income receipts and payments, "other" goods and services transactions, and net unilateral transfers.

Merchandise trade has traditionally dominated the gross level of current account transactions and in recent years has also dominated changes in those levels. In 1988 merchandise trade accounted for two-thirds of the total current account transactions, while investment income accounted for one-fifth and business services for one-ninth (Figure 2.4). The U.S. merchandise trade deficit in 1988 ($126.5 billion on a balance-of-payments basis) was far larger than the surpluses on business services and international investment income.

The U.S. trade surplus in business services peaked at $11.3 billion in 1982, but declined rapidly to a very small surplus in 1985 before recovering to a new peak surplus

Figure 2.4

U.S. Current Account Components, 1988 (Balance-of-Payments Basis)



of $19.0 billion in 1988. Looking to the near future, the composition and character of business services trade probably precludes it from increasing sufficiently to produce the large surpluses needed to offset continuing large merchandise trade deficits. (See Chapter 5 for further analysis of business services trade.)

Neither does international investment income appear to be a source of large surpluses, if any, in the near future. For many years the U.S. balance of international investment income receipts and payments has been positive, reflecting the earlier large U.S. net international creditor position. Until recently, the stock of U.S. investments abroad was far larger than the stock of U.S. assets held by foreigners and, thus, was an assured source of net U.S. international income receipts.

But the negative shift from the position of world's largest creditor to an international debtor position has seriously reduced U.S. net investment income inflows. These net receipts eroded from a peak $34.1 billion in 1981 to $22.3 billion in 1987, and then dropped precipitously to $2.2 billion in 1988. Continued large annual U.S. merchandise trade deficits will continue to enlarge the U.S. debtor position. Thus, the small positive net investment income flow can be expected to shift rapidly to net investment income payments to foreigners – possibly in 1989. (Chapter 6 discusses the role of the U.S. net income/payments flows and international debt.)

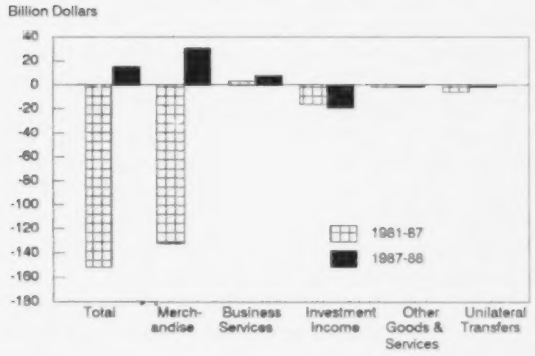
Other elements of the current account also do not offer good prospects for improved performance and large surpluses. The U.S. balance on "other" goods and services transactions has been increasingly negative for the last 10 years – reaching a deficit of $5.9 billion in 1988 – and is likely to continue to deteriorate. Unilateral transfers – payments with no corresponding flow of goods or services – include continuing U.S. Government transfers abroad for foreign aid, support payments for U.S. military bases, and pensions and other gifts and payments to individuals living abroad. Net unilateral

transfer payments were a $14.7 billion net outflow in 1988. This net negative balance will likely continue to enlarge gradually, partly reflecting continued grant aid and U.S. citizens retiring in foreign countries.

Between the last U.S. current account surplus in 1981 and 1987, the current account balance deteriorated to a record deficit of $143.7 billion. Over four-fifths of the total deterioration ($151.9 billion) occurred in the merchandise trade account (Figure 2.5). In 1988 this trend reversed, with the current account deficit shrinking to $17.2 billion below its 1987 level, mainly due to the sharp 1988 $32.3 billion drop in the merchandise deficit. However, in 1988, two-thirds of a potential current account reduction produced by that decrease in the merchandise trade deficit was offset by a $20.1 billion reduction in net international investment income receipts.

Figure 2.5

Changes in U.S. Current Account Balances, 1981-87 & 1987-88



This review of current account components reveals not only that merchandise trade has been the dominant source of the deterioration that has occurred in recent years, but a turnaround in current account performance also must come predominantly from merchandise trade, as was shown in 1988. Indeed, if the U.S. international debtor position continues to grow to a point where large debt servicing payments are required, merchandise trade surpluses, not just elimination of the deficits, will be required before an overall current account balance can be achieved.

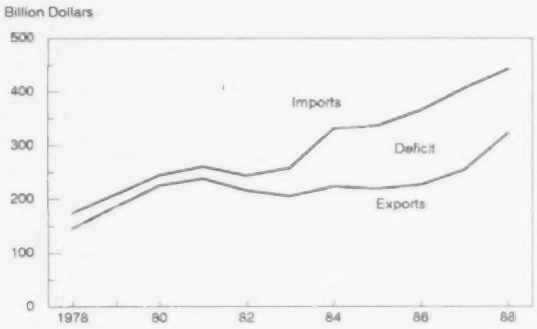
Shrinking U.S. Merchandise Trade Deficit

Since current account improvement must come primarily in the merchandise trade sector, an examination of merchandise trade performance can identify where changes have occurred and areas of significant potential improvement.

U.S. merchandise trade has been in deficit since 1975.[1] Deficits remained relatively small for several years, but the deficit doubled in 1983, doubled again in 1984, and reached in 1987 a peak of $152 billion (imports on a customs value basis) (Figure 2.6). In 1988 the deficit decreased sharply by 22 percent to $120 billion.

Figure 2.6

U.S. Merchandise Exports, Imports & Deficit 1978-88 (Exports f.a.s.; Imports Customs Value)



The explosive 1982-87 deficit growth was the result of very strong import growth, concurrent with virtual export stagnation. The sharp 1988 deficit reduction reflected a surge in exports and slower-than-average import growth. In 1987 exports increased by 11.8 percent to $254 billion, finally exceeding their 1981 prior peak. Exports accelerated in late 1987 and early 1988, rising by 26.8 percent to $322 billion for 1988 as a whole.

Import growth rose irregularly after a 1982 recession pause, averaging 10.6 percent per year and reaching $441 billion in 1988. Imports in 1988 were 37 percent greater than exports. For several years prior to 1982, much of U.S. import growth was due to rapidly enlarging oil imports required to supplement diminishing U.S. supplies. But since then, import growth has been primarily in manufactures competing against U.S. produced goods.

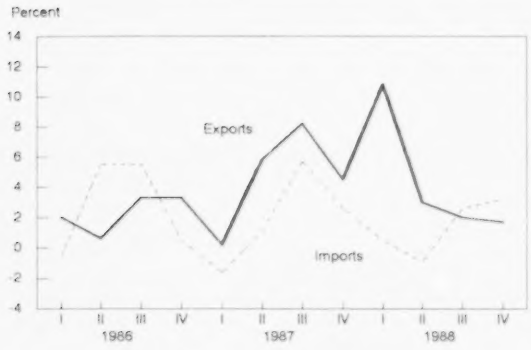
Most of the 1988 growth in U.S. export volume (in real, constant 1982 dollar terms) took place in the first quarter of the year. As the year progressed, signs emerged of a slowing in export volume growth, even after adjustment of the data to a seasonally adjusted basis. This slowing export growth is particularly evident in volume terms. From a quarterly growth of 10.8 percent (annual rate) in the first quarter of 1988, the rate slowed to 1.7 percent in

[1] Hereafter in this report, unless otherwise noted, merchandise trade data cited are on the Census measurement: exports (domestic and foreign), f.a.s.; and general imports, customs value basis.

the fourth quarter (Figure 2.7). As a result, the deficit in volume (real) terms decreased sharply by 14.3 percent in the first quarter and 10.5 percent in the second quarter, but increased by 4.2 percent in the third and 7.3 percent in the fourth quarters.

Figure 2.7

U.S. Merchandise Trade Volume, Quarterly, 1986-88 (GNP Basis, In Constant 1982 Dollars)



Partly contributing to the slower export growth in the last half of 1988 was an acceleration in export price increases. Higher export prices partly reflected the tightening in U.S. industrial capacity in a number of industries, with very high capacity use in several, which led to lengthening shipment delivery times. Higher export prices also reflected increased agricultural prices resulting from the drought. Export prices are reported to have accelerated from a 1.0 percent price rise in 1987 to a 6.8 percent rise in 1988 (on a GNP accounts basis).

Import price increases are reported to have edged up at slower rates in 1988, rising by an average of 4.6 percent in 1988 from 7.7 percent in 1987. The increase in imported manufactured goods prices was partly offset by a near 15 percent drop in the average prices of imported petroleum and petroleum products.

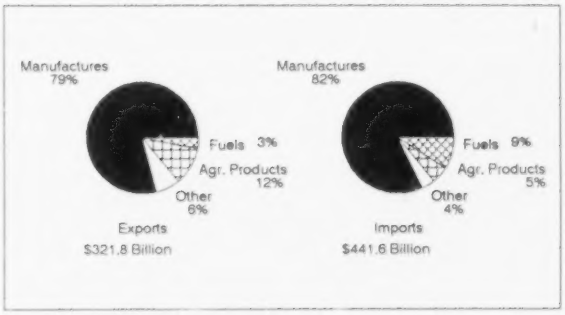
The slowdown in U.S. trade deficit reduction after the first quarter of 1988 possibly reflects a tapering off of price competitiveness gains from the post-February 1985 dollar devaluation and possibly the negative price competitiveness effects of the smaller mid-1988 dollar appreciation. According to the OECD, the post-1985 devaluation benefits for U.S. export competitiveness led to a largely one-time gain, or reduced losses, in market share, but not a continuing shift in share, as a continuing share improvement requires continuing devaluation. Thus, the high early-1988 U.S. export growth rate could be expected to slow down. Furthermore, the OECD indicates that a long-term rise in export share and corresponding deficit reduction would require an absolute cost advantage, and therefore technology advantage, that continues over the long run.

Composition of U.S. Merchandise Trade

An examination of U.S. merchandise trade's four major categories – manufactures, mineral fuels, agricultural products, and other goods – indicates why manufactures has dominated U.S. merchandise trade and will also need to account for most of any future deficit reduction. In 1988 manufactured goods accounted for about four-fifths of both U.S. exports and imports (Figure 2.8). Agricultural products represented 12 percent of U.S. exports in 1988, and fuels imports – largely petroleum – accounted for 9 percent of U.S. imports.

Figure 2.8

Composition of U.S. Merchandise Trade, 1988



The 1981-87 negative swing in the manufactures trade deficit of $146.8 billion was 13 percent larger than the total worsening in the overall U.S. merchandise trade deficit. The level of recent large U.S. merchandise trade deficits largely reflected deficits in manufactures trade (Figure 2.9). The 1988 merchandise trade deficit was $119.8 billion, with nearly 90 percent of that total accounted for by the $106.4 billion manufactures trade deficit. Trade in fuels is the other major deficit item – $32.9 billion in 1988. The 1988 agricultural surplus was $16.4 billion, substantially lower than the $29.6 billion surplus of 1981.

A more detailed look at performance in each of these major product categories over recent years highlights past movements and helps identify likely future trends.

Mineral Fuels

The United States has incurred very large mineral fuels deficits in recent years. Imports – mostly oil and some natural gas – have far outweighed relatively modest exports – mostly coal (Figure 2.10). Mineral fuels

Figure 2.9

U.S. Merchandise Trade Balances, by Major Category, 1988

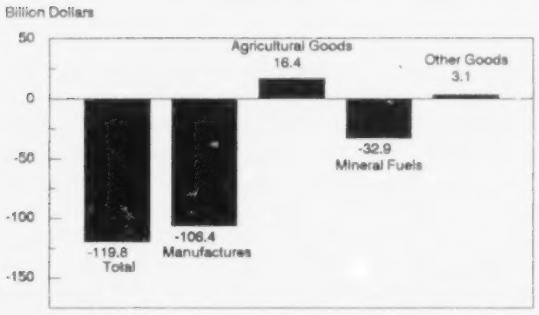
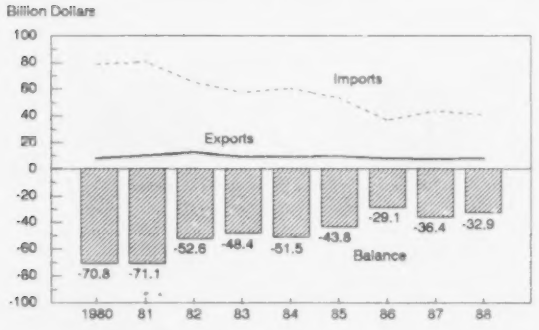


Figure 2.10

U.S. Mineral Fuels Trade, 1980-88



imports peaked in 1981 at $81.4 billion, leaving the United States with a $70.8 billion mineral fuels deficit that year.

Beginning in 1982, oil prices trended downward, substantially reducing the total cost of mineral fuels imports. By 1986 fuel imports were down to $37.3 billion and the deficit down to $29.1 billion, cutting the mineral fuels deficit by more than one-half – by $42.0 billion – in five years. However, the 1988 fuel deficit ($32.9 billion) was slightly larger than in 1986, reflecting slightly lower import prices that were more than offset by higher import volume.

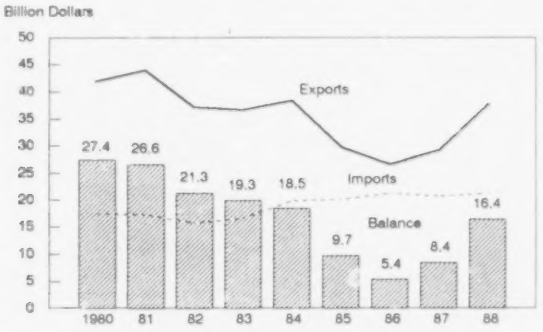
Current oil price trends suggest that the gains of the last few years in the U.S. oil deficit have at least temporarily ended, as spot prices and import volumes have been rising. Thus, further improvement in the fuels deficit is not a likely source of shrinkage in the merchandise trade deficit over the next several years. In any case, U.S. oil imports and deficits in the mineral fuels account will continue to be large.

Agricultural Trade

U.S. trade in agricultural commodities and products provided substantial trade surpluses in earlier years, but during 1985-87 the surpluses were much lower. In 1988 export volume continued low; however, export value jumped by 29 percent due to a sharp rise in export prices, partly reflecting the drought. As a result, the agricultural export surplus doubled to $16.4 billion (Figure 2.11).

Figure 2.11

U.S. Agricultural Goods Trade, 1980-88



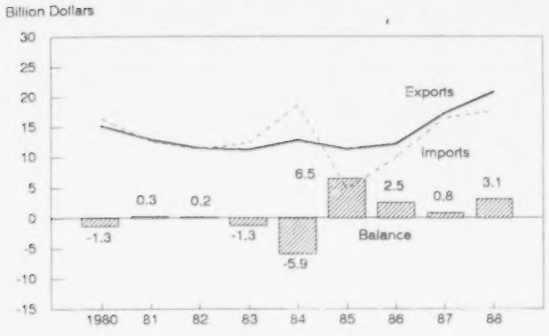
An early return to the large U.S. agricultural trade surpluses of prior years seems unlikely. In most recent years, global food production has been growing considerably faster than global demand. The "green revolution" that has rapidly expanded global supplies resulted from several factors, including better agricultural technology and better infrastructure to support food production and distribution, especially in the developing countries. The increased use of market incentives in developing and centrally planned economies and increased production subsidies by some producers, including the European Community, have also been important factors in the rapid expansion of global food supplies. Given the fundamental change in the supply-demand relationship and assuming normal weather patterns, a major resurgence in U.S. agricultural trade surpluses in the next several years is unlikely.

Other Nonmanufactured Goods Trade

"Other goods" is a relatively small component of U.S. merchandise trade that includes paper pulp, wood, hides and skins, beverages, and metal ores. In 1988 these other goods accounted for only 6.4 percent of U.S. exports and 4.0 percent of imports. Balances in this account have fluctuated in a narrow band and since 1984 have produced small surpluses. In 1988 this category produced a $3.1 billion surplus (Figure 2.12). Major

Figure 2.12

U.S. "All Other Goods" Trade, 1980-88



changes in exports, imports and balances seem unlikely in the foreseeable future.

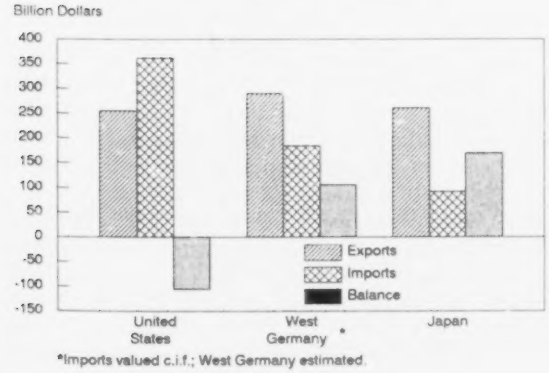
Manufactures Trade

U.S. manufactures trade is huge and growing. Rapid changes in manufactures are occurring in product composition, import sources, export destinations, and bilateral balances. The United States was the third largest exporter of manufactured goods in 1988, with West Germany the leader and Japan second (Figure 2.13). The United States does, however, remain the world's largest manufactured goods trader, with exports plus imports in 1988 totaling $617 billion.

The United States continues to import far more manufactures than other countries, with imports in 1988 reaching a record $361.7 billion. West Germany ranked second, but at a level one-half that of the United States. Japan imported much less manufactures than West Germany and only one-fourth that by the United States.

Figure 2.13

Manufactures Trade of Selected Countries, 1987



*Imports valued c.i.f.; West Germany estimated.

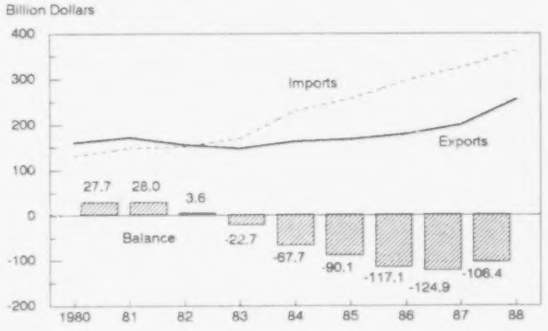
Japan also, on a per capita basis, appears to be the smallest manufactures importer among the major developed countries.

Not only are U.S. manufactures imports huge compared with other nations' imports, they also dwarf U.S. exports. In 1988 U.S. manufactures imports were 42 percent larger than U.S. exports, which reached a record $255.3 billion. Because U.S. manufactures imports are so much larger than manufactures exports, exports must now rise over 1.4 times as fast as imports to keep the manufactures trade deficit from enlarging further.

Manufactures exports peaked in 1981, then declined sharply in 1982 and 1983. Recovering thereafter, manufactures exports in 1986 topped the prior 1981 peak, and in 1988 exceeded that peak by 49 percent (Figure 2.14). Manufactures imports, however, have increased without interruption since 1975 and by 1988 were 141 percent above their 1981 level.

Figure 2.14

U.S. Manufactures Trade, 1980-88



The sharply divergent trends in U.S. manufactures exports and imports since 1981 produced a rapidly growing manufactures trade deficit. From a modest $21.9 billion manufactures trade surplus in 1981, the balance rapidly deteriorated and in only six years reached a very large 1987 deficit of $124.9 billion, a swing of $146.8 billion. This trend was substantially reversed in 1988. The nearly twice as rapid 1988 rise in exports than imports resulted in a major reduction in the manufactures deficit – cutting it by 15 percent to $106.4 billion.

The total 1981-86 slippage in the U.S. manufactures balance was even greater in volume terms. In 1986 the volume of manufactures exports was 7 percent below the 1981 level, while import volume was 86 percent higher (Figure 2.15). Since 1986, however, the manufactures deficit in volume terms has been sharply improving. Import volume growth has been slowing since 1984, rising by 3 percent in 1987 and 1988.

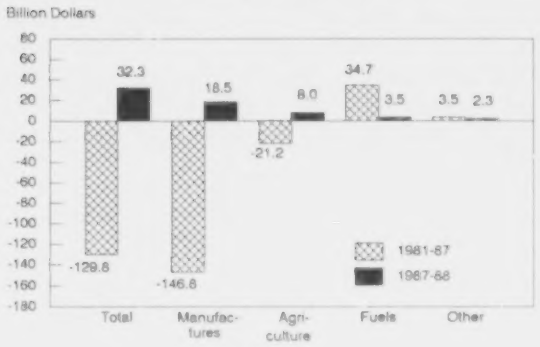
In volume terms, manufactures export volume grew at a faster rate than import volume in both 1987 and 1988,

Figure 2.15

U.S. Manufactures Trade Value & Volume, 1981-88 (Index 1981 = 100)

Figure 2.16

Changes in U.S. Merchandise Trade Balances, 1981-87 & 1987-88



unlike in the preceding years. Moreover, export volume in 1988 surged by 21 percent.

An overview of merchandise trade performance between 1981 and 1987 shows that the $148.6 billion slippage in the manufactures trade balance was greater than the $129.8 billion deterioration in total merchandise trade deficit (Figure 2.16). The $21.2 billion drop in the agricultural surplus was also a negative factor in the 1981-87 overall merchandise trade performance. But the $34.7 billion decrease in the fuels deficit over that period provided a significant offset against growth of the overall merchandise deficit.

Over half of the $32.3 billion improvement in the 1988 total merchandise trade deficit was accounted for by a $18.5 billion reduction in the manufactures trade deficit. One-fourth of the overall deficit reduction was provided by a rise in the agricultural surplus and an even smaller share of the deficit reduction was contributed by a reduction in the fuels deficit.

Comparing performance over the last seven years with prospects for the next several years for the various components of merchandise trade is revealing. "Other" goods will continue to be a relatively minor factor in U.S. trade balances. Moreover, the prospects for returning to large agricultural surpluses seem remote. Some improvements may occur, but global food supplies may well continue to grow more rapidly than demand for the foreseeable future. In addition, improvements in the oil account experienced over the 1981-87 period seem unlikely to continue. Oil import volumes and prices have begun to increase, indicating the oil import bill has started to grow again.

Summary

The United States is highly dependent on manufactures trade to improve the overall U.S. trade balance. Over two-thirds of the overall current account deficit in 1988 was accounted for by manufactured goods. The surpluses in business services ($19 billion) and agriculture ($16 billion) are too small to significantly offset the $106 billion manufactures trade deficit.

Manufactures trade was the key to the 1981-87 deterioration of both the overall current account and the merchandise trade account. Similarly, the 1988 reduction in the manufactures deficit contributed over half of the 1988 improvement in the overall trade deficit. Given the lack of other sources of large improvements, manufactures trade is also the component that must be the dominant source of further improvement in the current account and merchandise trade deficits.

The fact that U.S. current account and merchandise trade balance improvements must come primarily in manufactures trade is significant, for both the United States and its trading partners. When the U.S. trade deficit narrows, the large surpluses of some U.S. trading partners—built primarily on manufactures exports—inevitably must also shrink. This may cause significant structural adjustment challenges for some trading partners who have come to rely on ever-expanding manufactures trade surpluses as a major source of their economic growth.

3

U.S. MANUFACTURES TRADE

This chapter provides a detailed review of U.S. manufactures trade performance in 1988. The key role of manufactures in overall U.S. trade performance is discussed in Chapter 2.

Between 1981 and 1987, the U.S. manufactures trade balance worsened by $146.8 billion, which more than accounted for the overall U.S. trade deficit growth of $129.8 billion. Then in 1988 – for the first time this decade – both the manufactures and overall deficits improved, shrinking by $18.5 billion and $32.3 billion respectively.

For U.S. manufactures exports, 1988 was a banner year. Exports jumped by 27.6 percent from their 1987 level. This large increase was remarkable compared with the 2.5 percent average annual growth during 1981-86. Strong economic growth abroad, coupled with a favorable dollar exchange rate, were the primary factors that led to U.S. export gains in 1988.

Manufactures imports continued their long-term expansion in 1988 – sustained by strong U.S. domestic demand. Although substantial, the 1988 import growth rate was less than half that for exports. Manufactures imports grew by 11.3 percent in 1988, faster than the 9.4 percent 1987 rate, but slightly slower than the 13.7 percent annual average increase during the 1981-87 boom years. However, the slower-than-average 1988 import growth rate was largely accounted for by a substantial slowdown in the growth of the motor vehicle imports. Excluding the huge motor vehicle product group, the rest of manufactures imports actually grew slightly faster in 1988 than in 1981-87 – 14.3 percent compared with an average 12.9 percent.

Manufactures Trade on an End-Use Basis

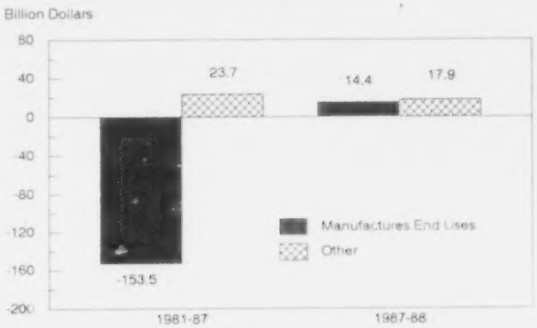
Traded goods can be categorized according to their presumed end-use – for example, as capital or consumer goods. However, such data should be treated cautiously as end-use groupings can be misleading. For example, personal computers are classed as capital goods even if bought for home (consumer) use. Nevertheless, end-use classifications provide a general overview of the sources of demand for products that comprise exports, imports and the trade balance. For this purpose, only domestic exports are covered.

Most of the growth in the overall U.S. trade deficit in the 1980s and nearly half of the 1988 deficit reduction are accounted for by shifts in the end-use product groups that are primarily manufactured goods: industrial supplies (excluding fuels), capital goods, automotive, and other consumer goods (Figure 3.1).[1]

Between 1981 and 1988, shifts in the end-use trade structure of these manufactures categories occurred principally in imports; the end-use structure of exports was relatively stable. Between 1981 and 1987, the share of manufactures end-use imports accounted for by automotive products and other non-food consumer goods rose from 45 to 54 percent (Figure 3.2). During the same period, the share accounted for by capital goods increased more moderately, rising from 24 to 26 percent. In contrast, the share of non-fuel industrial supplies fell sharply from 31 to 20 percent.

Figure 3.1

Changes in U.S. Trade Deficit, by End Use, 1981-87 & 1987-88



*Exports exclude military end uses.

[1] These four end-use groups exclude manufactured military-use exports.

Figure 3.2

End-Use Shares of U.S. Manufactures Imports, 1981-88

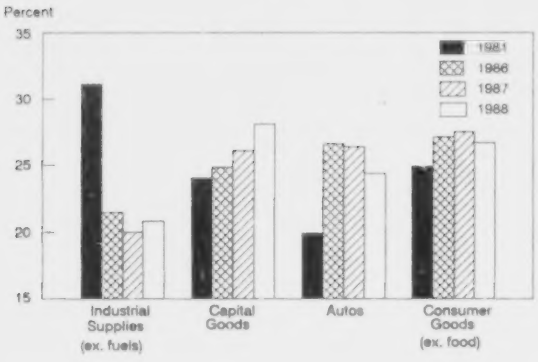


Figure 3.3

U.S. Manufactures Trade Balances, by End Use, 1981-88

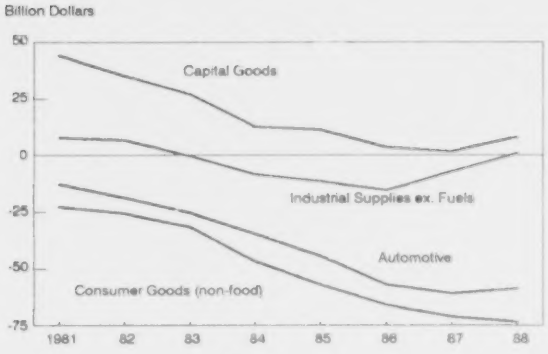
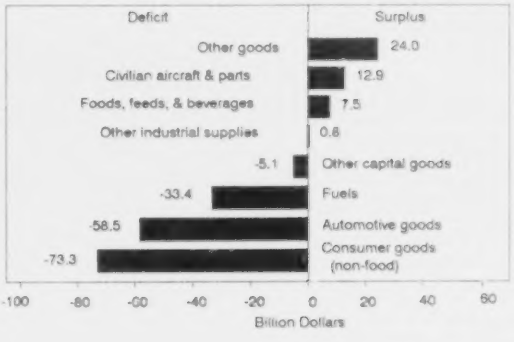


Figure 3.4

U.S. Trade Balances, by End Use, 1988



In 1988 the end-use changes in the structure of manufactures imports reversed. The share accounted for by autos and other consumer goods decreased from 54 to 51 percent. Concurrently, the capital goods share rose from 26 to 28 percent and the non-fuel industrial supplies' share recovered slightly from 20 to 21 percent.

In contrast to imports, the composition of U.S. exports in the manufactures end-use categories in the 1980s remained relatively stable. Between 1981 and 1988, the export shares of automotive products and other non-food consumer goods increased at the expense of non-fuel industrial supplies and capital goods.

In 1988 all but one of the manufactures end-use trade balances improved. Increasing deficits in consumer goods and automotive products, together with a decreasing surplus in capital goods, contributed most of the increase in the overall U.S. manufactures deficit in the 1980s. Between 1981 and 1987, automotive and non-food consumer goods deficits worsened each year (Figure 3.3). In 1988 the deficit in non-food consumer goods continued to deteriorate, albeit more slowly, to $33.4 billion. However, in 1988 the automotive deficit improved slightly to $58.5 billion (Figure 3.4). The surplus in capital goods between 1981 and 1987 shrank from $44 billion to $1.5 billion, and then rebounded slightly in 1988 to $7.8 billion. The balance in non-fuel industrial supplies – although less volatile than other end-use balances – between 1981 and 1986 slipped from a $27.4 billion surplus to a $15.6 billion deficit before recovering to a small 1988 surplus.

High-Tech Versus Non-High Tech Trade Performance

Manufactures products can be classified as high-tech and non-high tech products. High-tech products are defined as products in groups having the highest technology intensity in terms of average U.S. research and development (R&D) expenditures per unit of output. These intensities are group averages and thus only identify groups in which most of the so-called individual high-tech products are classified. However, some individual high-tech products might not be included as their group's average intensity is too low. Product groups with lower R&D intensities are characterized as non-high tech product groups. Designation of which product groups are high-tech is in accordance with the "DOC-3" definition. (See the statistical appendix tables for a list of those high-tech products.)

U.S. high-tech trade prior to 1980 had been increasingly in surplus. Moreover, high-tech trade comprised a growing share of U.S. manufactures exports and imports.

However, after the early 1980s the once internationally preeminent high-tech trade position of the United States deteriorated. U.S. high-tech trade surpluses declined rapidly and recorded a small deficit in 1986 – the first in recent history (Figure 3.5). Moreover, since 1983 the share of U.S. manufactures exports accounted for by

Figure 3.5

U.S. High-Tech Manufactures Exports & Imports, 1980-88

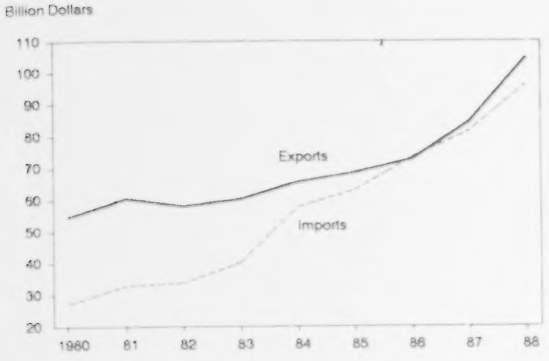
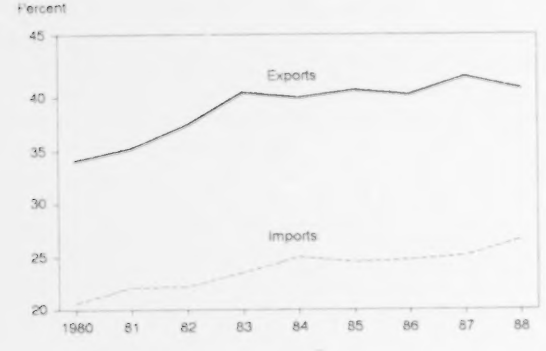


Figure 3.6

High-Tech Shares of U.S. Manufactures Export & Imports, 1980-88

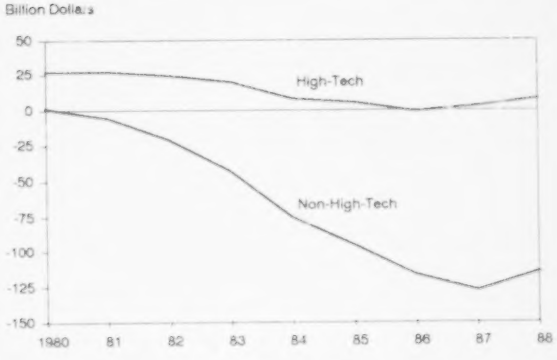


high-tech product groups has leveled off at about 40 percent (Figure 3.6). Meanwhile, the share of total manufactures imports in the high-tech category rose fairly steadily to nearly 27 percent in 1988.

These trends indicate that past U.S. leadership in technology no longer guarantees future U.S. high-tech trade surpluses. Deterioration of the U.S. high-tech trade position reflects several important changes in the world economy. Transmission abroad of U.S. technology has accelerated. Increased foreign R&D efforts and production capabilities also have made other nations more competitive in high-tech goods. Internationalization of production has intensified as R&D, product innovation, and various production process stages formerly undertaken in the United States are increasingly carried out abroad. Nevertheless, U.S. trade performance in high-tech goods remains stronger than in products of lower technological intensity (Figure 3.7).

Figure 3.7

U.S. High-Tech & Non-High Tech Manufactures Trade Balances, 1980-88



High-Tech Trade

Since 1986, when the U.S. high-tech trade balance slipped into a $700 million deficit, the trend has been more positive. The high-tech balance returned to surpluses of $2.7 billion in 1987 and $8.1 billion in 1988. This improvement was accounted for by rapid export growth coupled with slightly slower import growth.

Between 1981 and 1986, U.S. high-tech exports growth averaged only 4 percent annually. However, since 1986 U.S. export growth in this category has accelerated – surging by 14 percent in 1987 and 24 percent in 1988. Growth of high-tech imports, which averaged 17 percent per year between 1981 and 1986, slowed to 7 percent in 1987 and then accelerated in 1988 by 18 percent.

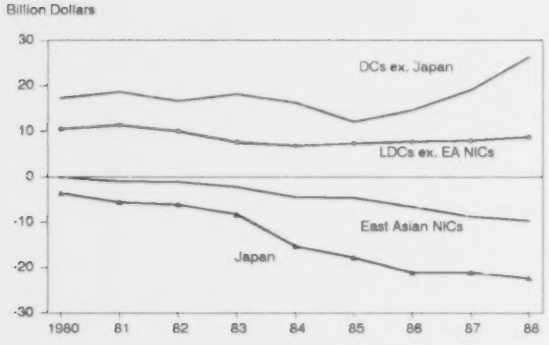
A large part of the pre-1987 deterioration in the U.S. high-tech balance has been attributable to trade with Japan and the East Asian NICs, the only major countries or country groups with which U.S. high-tech trade has recorded persistent deficits. The U.S. deficit with Japan in high-tech products grew from $5.6 billion in 1981 to $21.1 billion in 1986 and continued to expand, albeit more slowly, to $22.3 billion in 1988. The deficit with the East Asian NICs, which grew from $1.0 billion in 1981 to $6.6 billion in 1986, has grown even more rapidly since then, to $9.6 billion in 1988 (Figure 3.8).

In contrast, the United States has continued to have high-tech surpluses with the developed countries as a group, excluding Japan, with that surplus expanding from $14.6 billion in 1986 to $26.2 billion in 1988. The surplus with the European Community totaled $16.9 billion in 1988. Similarly, U.S. high-tech trade has remained in surplus with the developing countries other than the East Asian NICs, with that surplus rising modestly from $7.4 billion in 1986 to $8.7 billion in 1988.

U.S. high-tech trade is heavily concentrated in four of the 10 high-tech product groups: communications

Figure 3.8

U.S. High-Tech Trading Partner Balances,



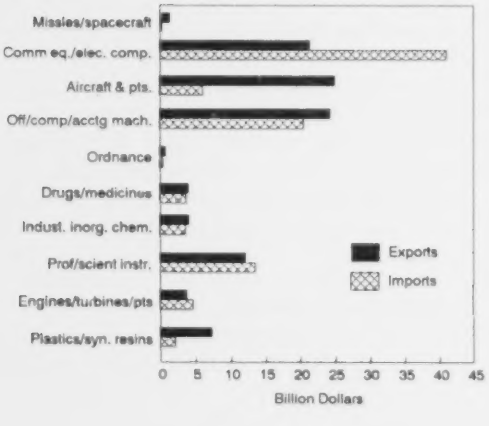
equipment and electronic components; office, computing, and accounting machines; aircraft and parts; and instruments (Figure 3.9). These four groups accounted for 82 percent of the total high-tech trade in 1988.

Three of the largest high-tech groups and four smaller ones – a total of seven high-tech groups – were in surplus in 1988, with the $18.9 billion surplus in aircraft and parts by far the largest surplus. However, the latter was more than offset by the $19.8 billion deficit in communications equipment and electronic components.

The 1988 improvement in the overall U.S. high-tech trade balance reflects improvement in 6 of the 10 high-tech groups' balances. Most notable were surplus increases in office, computing and accounting machines; plastics and synthetic resins; and the volatile aircraft and parts group. Also in 1988 the deficit sharply decreased in professional and scientific instruments. In contrast, however, the huge deficit in communications equipment and electronic components continued to expand as imports surged by nearly 30 percent (Table 3.1).

Figure 3.9

U.S. High-Tech Product Exports & Imports, 1988



Non-High Tech Manufactures Trade

U.S. trade in non-high tech manufactured product groups has traditionally been more vulnerable to foreign competition, as reflected in the huge deficits they incurred in the 1980s. Between 1981 and 1987, the non-high tech deficit expanded from $5.4 billion to $127.6 billion. In 1988, however, the deficit was reduced by $13.1 billion to $114.5 billion.

About 40 percent of the deficit in non-high tech products has been accounted for by motor vehicles trade and an additional 20 percent by clothing and footwear. Iron and steel trade has also been an important deficit group.

Performance of Individual Product Groups

Examining the trade performance of individual manufactures groups also helps identify sources of the 1981-87 deterioration in the U.S. manufactures trade balance and its 1988 turnaround. This section describes their performance at two levels of disaggregation in trade statistics classifications: first in the 5 broad 1-digit categories and then in the 41 2-digit product groups. These product groups are defined according to the U.S. Bureau of the Census Schedules A (for imports) and E (for exports).

1-Digit Manufactures Groups

Manufactures are defined in terms of five 1-digit product groups – sections 5 though 9. These five groups can be disaggregated roughly into two groups: (1) intermediate goods or industrial supplies and (2) finished goods. Chemicals (section 5) and manufactured goods classified by material (section 6) are sometimes termed "intermediate goods" or "industrial supplies" – that is, they are mainly inputs that will be further processed into more finished products. Machinery and transport equipment (section 7), miscellaneous manufactures (section 8), and commodities and transactions not classified elsewhere (section 9) are sometimes referred to as "finished goods" – that is, as the final products used by producers and consumers. The two broad groupings indicate general differences in their stage of production in the overall manufacturing process. However, these broad groups are not precise. For example, the machinery and transportation group includes many components and parts that will be further processed or assembled into more finished goods, and chemicals includes perfumes, soaps, and some other finished products.

Table 3.1

High-Tech Trade Balances, 1981 and 1986-88
(Billions of dollars)

Group	1981*	1986	1987	1988	Change 1987-88
Total	27.4	-0.7	2.7	8.1	5.4
Aircraft & parts	13.2	12.7	15.2	18.9	+3.7
Office, computing & accounting machines	6.9	2.6	2.2	3.8	1.6
Plastics & resins	4.2	2.9	3.9	5.3	1.4
Instruments, professional & scientific	1.5	-2.6	-2.6	-1.5	1.1
Communications equip. & electronic components	3.4	-17.9	-17.8	-19.8	-2.0
Other products	5.0	1.6	1.7	1.3	-0.3

* Peak year of high-tech surplus.

The production process for finished manufactures, in addition to differing from that for other manufactures in terms of stage of processing, also tends to differ in terms of capital versus labor intensiveness. The basic manufacturing processes for producing chemicals and manufactured goods classified by materials involve the transformation of raw materials into more advanced forms which are generally used for further manufacturing. These transformations are mostly capital-intensive machine controlled or driven operations, requiring large-scale capital equipment like furnaces, pumps, mixers, presses, etc. Compared to other types of manufacturing, a relatively limited amount of labor is needed to monitor, regulate, or service the processing machinery and to maintain adequate flows of raw materials.

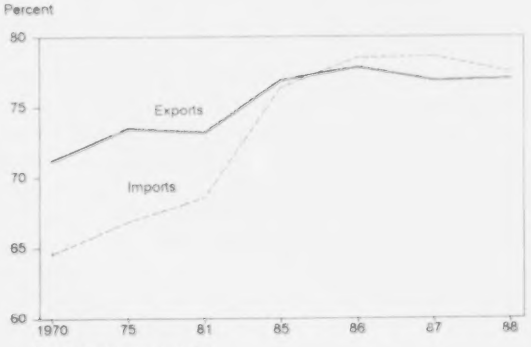
By contrast, the production processes for machinery and transport equipment and miscellaneous manufactures generally are more labor intensive, in which workers use specialized tools to machine and assemble parts into more complex products. The labor content of the assembly process tends to be higher than that of raw materials transformations. However, robotics are increasingly used to substantially reduce the intensity of labor necessary in assembly operations as machines can increasingly perform tasks requiring complex and repetitive movements. Nevertheless, the capital intensity of materials transformation will likely remain higher than that of assembly operations.

The composition of U.S. manufactures exports and imports rapidly shifted towards finished goods (sections 7, 8, and 9) in the early 1980s, but appears to have stabilized since 1985 (Figure 3.10). The finished goods share of manufactures imports rose from 65 percent in 1970 to about 78 percent since 1985. The finished goods share of exports also rose, but not quite so sharply as for imports – rising from 71 percent in 1970 to 77 percent since 1985.

Finished goods trade is likely to continue increasing its share of total U.S. manufactures trade as internationalization of manufacturing processes increases – that is, as the production of components to be included in larger assemblies becomes more and more specialized and geographically dispersed. For example, a given product part or component categorized as a "finished good" can readily appear three times in U.S. trade data: first, as an export sent out of the country for further assembly into a larger component; second, as an import included in a larger component produced by foreign assembly operations; and third, as an export included in a final finished product for sale abroad.

Figure 3.10

Finished Goods* Shares of U.S. Manufactures Trade, 1970, 1975, 1981 & 1985-88



* Sch. A/E Classes 7, 8, & 9.

Table 3.2

U.S. Manufactures Trade Balances, by Major Category, 1981-88*
(Billions of dollars)

Category	1981	1986	1987	1988
Intermediate goods, total	-3.7	-26.2	-24.9	-25.1
Chemicals	1.9	7.9	10.4	12.7
Manufactures classed by material	-15.6	-34.1	-35.3	-37
Finished goods, total	20.7	-101.1	-106.4	-91.3
Machinery & transport equip.	28.1	-62.3	-64.1	-54.6
Misc. manufactures	-8.5	38.8	-44.1	-43.8
Commodities & transactions not classified elsewhere	-1.2	-0.1	1.9	7.1

*Excludes undocumented exports to Canada, for which commodity composition is unavailable.

2-Digit Manufactures Groups

Manufactures exports and imports can be further subdivided into about 40 2-digit product groups. (See the data notes preceding the Statistical Appendix for descriptions of individual product groups.)

The internationalization of production processes is clearly illustrated by examining the 10 leading 2-digit U.S. export and import product groups which account for nearly two-thirds of U.S. trade (Figure 3.11). Seven of the 10 largest U.S. export product groups are also among the 10 largest import items, implying considerable trade in both directions in parts and finished goods within each of these groups. For example, the single largest U.S. product deficit – road motor vehicles (section 78) – is both the largest export and import product group. Exports include not only the shipment of finished vehicles for final sale, they also include parts and engines for foreign assembly operations. Some of these parts and engines reappear in some finished vehicle imports. The 10 largest 2-digit export, import, surplus, and deficit product groups are shown in the Statistical Appendix

Trade Balances. The overall U.S. manufactures trade deficit improved in 1988 for the first time since 1980 – shrinking by $18.5 billion to $106.4 billion. U.S. trade balances in nearly two-thirds of the 2-digit product groups improved in 1988 either in terms of larger surpluses or smaller deficits from their 1987 level. Nevertheless, most 2-digit product balances remained weaker than in the early 1980s. Improved balances include road motor vehicles (section 78). The 1988 balance improvements were mainly due to faster export than import growth; few of the import categories actually decreased.

The 10 largest surplus product groups in 1988 increased over 1987, and surpluses of 7 of those groups surpassed their 1981 levels (Figures 3.12 and 3.13). The largest surplus gain – $3.7 billion in nonmonetary gold (section 97) – partly reflects a large export increase to Taiwan. Other large surplus gains include $2.8 billion by aircraft and other nonautomotive transport equipment (section 79), and $1.3 billion by plastics and synthetic resins (section 58).

Trade deficits in three of the four largest deficit groups decreased in 1988. The deficit in road motor vehicles (section 78) in 1988 – $47.3 billion and accounting for 44 percent of the total manufactures deficit – decreased by $3.9 billion. In addition, the deficit in miscellaneous manufactured goods (section 89) declined by nearly $1 billion and in telecommunications and sound reproducing equipment (section 76) fell for the second

Figure 3.11

Top 10 Product Exports & Imports, 1988

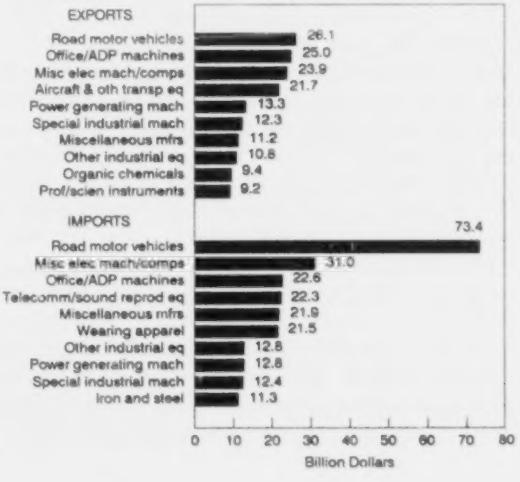


Figure 3.12

Top 10 Product Surpluses & Deficits, 1988

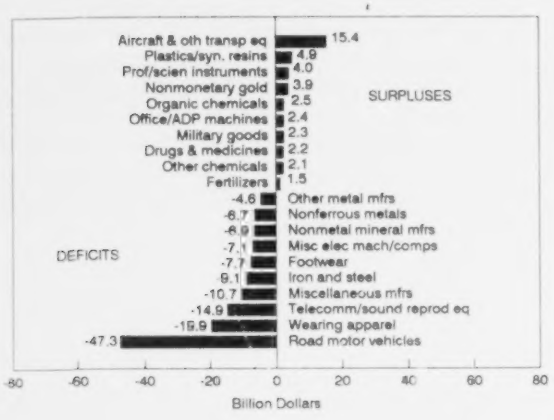
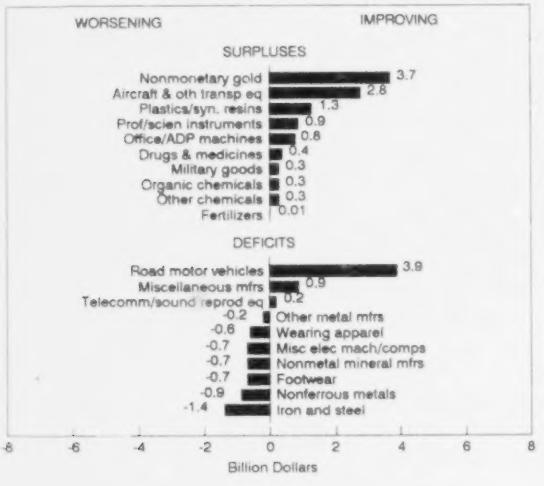


Figure 3.13

Changes in Top 10 Product Surpluses & Deficits, 1987-88



straight year. In contrast, the U.S. deficit in iron and steel (section 67) surged upward, in part because of domestic supply constraints which encouraged imports.

Exports. Aided by the more competitive dollar exchange rate, 1988 was a boom year for U.S. manufactures exports. Manufactures exports jumped 11.2 percent in 1987 and again by 27.6 percent in 1988 from an average 1981-86 growth rate of less than 1 percent. All the 2-digit export product groups grew faster in 1988 than their 1981-86 average, and most grew more rapidly than in 1987.

Leading the 1988 export growth among the 10 largest export groups was the broad miscellaneous manufactures category (section 89), including sound recording media and toys, games, and sporting goods. Miscellaneous electric machinery and electronic components (section 77) advanced by one-third over their 1987 level. The other top 10 groups expanded between 19 and 30 percent.

Growth of several smaller export product groups was also noteworthy. Exports of nonmonetary gold (section 97) rose by 176 percent, most of which was purchased by Taiwan to help reduce its large trade surplus with the United States. Exports of nonferrous metals (section 68) rose by 66 percent and exports of tires and tubes for tires (section 62) by 49 percent. In addition, substantial export gains were posted in several products which have been more notable for import growth: iron and steel (section 67) up 63.4 percent, wearing apparel (section 84) up 36 percent, and footwear (section 85) up 39 percent.

Imports. Manufactures imports continued to grow rapidly in 1988 with one major exception – motor vehicles. Overall manufactures imports climbed by 11.3 percent in 1988 – somewhat slower than their 1981-86 average gain of 14.7 percent. However, excluding motor vehicles, manufactures imports grew by 14.3 percent in 1988, slightly faster than their 13.4 percent 1981-86 average.

Import growth slowed dramatically in 1988 in the huge motor vehicles product group (section 78), which accounts for one-fifth of total U.S. manufactures imports. The motor vehicle import growth rate dropped from its 1981-86 annual average of nearly 20 percent to only 1 percent in 1988. Contributing to the slowdown were higher dollar prices for Japanese and European imports resulting from dollar depreciation after early 1985.

As a whole, imports of non-motor vehicle manufactured products climbed by 14.3 percent in 1988 compared with 10.2 percent growth in 1987 and a 13.4 percent average during 1981-86. Growing faster in 1988 were imports of miscellaneous electrical machinery, including electronic components (section 77), which accelerated sharply from an annual average of 17 percent in 1981-86 to gains of 21 percent in 1987 and 27 percent in 1988. In addition, there was a resurgence in imports of iron and steel (section 67) which, after a 1981-86 decline, increased by 4 percent in 1987 and 25 percent in 1988. In contrast, import growth of several important product groups slowed sharply from their 1981-86 average: wearing apparel (section 84) gains slowed from an 18 percent average to 5 percent in 1988; telecommunications and sound reproducing equipment (section 76) slowed from an 18 percent average to 7 percent; and miscellaneous manufactures (section 89) slowed from a 16 percent average to 5 percent.

Import growth in some of the smaller U.S. commodity groups was notably high in 1988 – rising close to 30 percent in nonferrous metals (section 68), organic chemicals (section 51), medicinals and pharmaceuticals (section 54), and fertilizers (section 56).

Summary

The one-third improvement in the U.S. manufactures trade balance in 1988 occurred in most major product groups – an important turnaround in the U.S. trade performance of manufactured goods. Exports of manufactures jumped by 29 percent – a two and one-half times greater increase than in 1987 – while imports grew at 11 percent – less than their prior peak growth rate. The sharp rise in U.S. manufactures exports reflected both the post-1985 dollar devaluation and strong economic growth abroad.

The U.S. trade balances in both high-tech and non-high tech goods substantially improved. The rise in the high-tech trade surplus reflected improved balances in 6 of the 10 high-tech categories. However, the rise in the high-tech share of total manufactures imports demonstrates the rising competitive pressure posed by foreign technology competitiveness. While aircraft and parts contributed the largest high-tech trade gains for the United States in 1988, the balance in the key category of electronic components continued to worsen, despite a 25 percent rise in U.S. exports.

Chapter 4

REGIONAL AND COUNTRY MERCHANDISE TRADE PERFORMANCE

The first three chapters emphasized the importance of manufactures trade in the overall U.S. trade performance. This chapter provides an analysis of 1988 U.S. bilateral merchandise trade with major countries and regions around the world, with special emphasis on manufactures trade.

Regional Patterns of U.S. Trade

Total Trade

The $32.3 billion reduction in the U.S. trade deficit in 1988 reflected improved U.S. trade balances with every major country group and nearly all individual major U.S. trading partners. Among these, the deficit with the European Community was halved, the shortfall with Japan – which accounted for 37 percent of the total 1987 U.S. deficit – fell 8 percent, and the deficit with the four East Asian newly industrialized countries (East Asian NICs) – Hong Kong, Singapore, South Korea and Taiwan – also declined, falling by 17 percent.

While the United States traded with more than 160 countries and territories in 1988, the 10 largest U.S. trading partners – Japan, Canada, Mexico, Taiwan, Hong Kong, South Korea, France, West Germany, the Netherlands, and the United Kingdom – accounted for about 70 percent of total U.S. merchandise trade (66 percent of exports and 72 percent of imports) (Table 4.1).

Canada and Japan continued to be the United States' dominant trading partners in 1988, with 20 percent and 17 percent of total U.S. merchandise trade, respectively. Although Japan was the largest supplier to the U.S. import market, Canada remained the largest U.S. export destination, taking 22 percent of the total merchandise exports.

During the 1980s, the East Asian NICs accounted for increasing shares of U.S. trade, buying 11 percent of total U.S. merchandise exports while supplying 14 percent of

Table 4.1

Top 10 U.S. Trading Partners in 1988
(Domestic & foreign exports, f.a.s.; General imports, c.i.f.)
(Values in billions of dollars)

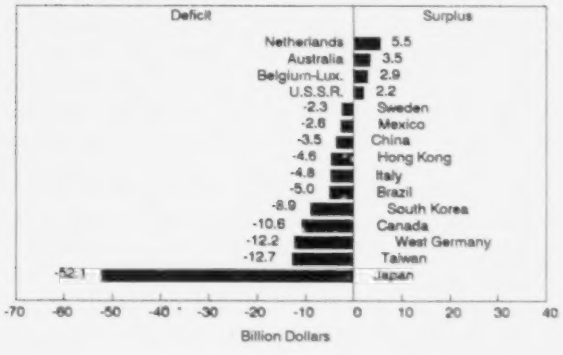
Exports				Imports			
Country	1987	1988	Percent of 1988 Exports	Country	1987	1988	Percent of 1988 Imports
Canada	$59,814	$70,862	22.0	Japan	$84,575	$89,802	20.3
Japan	28,249	37,732	11.7	Canada	71,085	81,496	18.5
Mexico	14,582	20,643	6.4	West Germany	27,069	26,503	6.0
United Kingdom	14,114	18,404	5.7	Taiwan	24,622	24,804	5.6
West Germany	11,748	14,331	4.4	Mexico	20,271	23,277	5.3
Taiwan	7,413	12,131	3.8	South Korea	16,987	20,189	4.6
South Korea	8,099	11,290	3.2	United Kingdom	17,341	18,042	4.1
Netherlands	8,217	10,095	3.1	France	10,730	12,217	2.8
France	7,943	10,085	3.1	Italy	11,040	11,611	2.6
Belgium/Luxembourg	6,189	7,405	2.3	Hong Kong	9,854	10,243	2.3
Total share			66.2	Total share			72.1

imports in 1988. Underscoring Taiwan's rising importance in U.S. trade, in 1988 it became the fourth largest source of U.S. imports and the sixth largest destination for U.S. exports, while South Korea ranked fifth and seventh, respectively.

The U.S. trade balance with every developed country improved in 1988, with the exception of Malta. The U.S. balances with three developed countries – Greece, Portugal and the United Kingdom – shifted from negative to positive. Overall, the deficit with the developed countries fell from $91.2 billion in 1987 to $71.8 billion in 1988, a decline of 21.2 percent. The deficit with Japan, which rose from $10.1 billion in 1980 to $56.3 billion in 1987 – the largest U.S. annual bilateral deficit recorded with another country – dropped by $4.2 billion to $52.1 billion in 1988. Nevertheless, the deficit with Japan far surpassed the second largest deficit – the $12.7 billion shortfall recorded with Taiwan (Figure 4.1).

Figure 4.1

Largest Surplus & Deficit U.S. Bilateral Trade Balances, 1988



The U.S. trade deficit with the developing countries as a whole, after reaching an all-time high of $59.4 billion in 1987, dropped 22 percent in 1988 to $46.2 billion, roughly equalling the 1986 deficit with this group. Over 60 percent of the 1988 shortfall with the developing countries was incurred with the East Asian NICs. The U.S. deficits with Taiwan ($12.7 billion) and South Korea ($8.9 billion) were the second and fifth largest U.S. bilateral deficits.

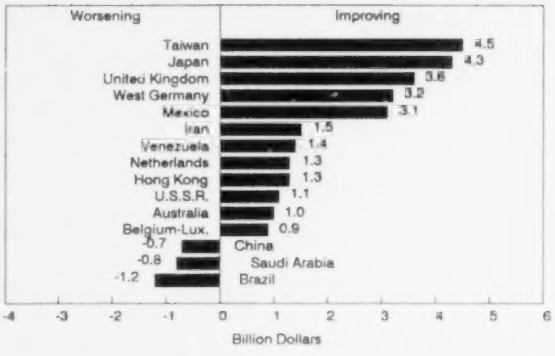
In contrast with 1987, when U.S. merchandise trade deficits with most major countries and country groups worsened, 1988 deficits improved with nearly all major U.S. trading partners – except Brazil and China, with whom deficits went from $3.8 to $5.0 billion and $2.8 to $3.5 billion, respectively (Figure 4.2).

Manufactures Trade

Over the last decade, manufactures trade has become an increasingly large component of total U.S. merchandise trade. In 1980, 71 percent of U.S. exports

Figure 4.2

Largest Changes in U.S. Bilateral Trade Balances, 1987-88



and 54 percent of imports were classified as manufactured goods. Since then, the percentages have risen steadily, in 1988 reaching 79 percent and 82 percent respectively.

The top 10 U.S. trading partners in manufactured goods accounted for a larger share of both U.S. manufactures exports and imports than of total merchandise trade. Canada and Japan were by far the largest suppliers of manufactures imports and purchasers of U.S. manufactures in 1988, with Canada taking 26 percent of total U.S. manufactures exports and providing 18 percent of total U.S. manufactures imports. Japan accounted for 25 percent of U.S. manufactures imports, but only 9 percent of U.S. manufactures exports.

The patterns of U.S. manufactures trade with the different countries and regions of the world have changed markedly since 1981 (Figures 4.3 and 4.4). Canada, Japan, the centrally planned economies (CPEs) and the East Asian NICs have each significantly increased their shares of U.S. manufactures exports, while Latin America and the other developing countries' shares decreased. At the same time, the CPEs, the East Asian NICs, and Latin America increased their shares of U.S. manufactures imports, while Canada, the European Community, and the other developed nations' shares of the U.S. import market decreased.

The $18.5 billion decline in the overall U.S. manufactures trade deficit in 1988 reflected improved balances with most countries even though the majority remained in deficit (Figure 4.5). The U.S. manufactures deficit with Japan was by far the largest ($67.2 billion) and accounted for two-thirds of the $106.4 billion total manufactures trade shortfall in 1988 (Figure 4.6).

U.S.-Japan Trade

Total Trade

The U.S.-Japan trade imbalance, while remaining very large, shrank by 7 percent from $56.2 billion in 1987 to

Figure 4.3

Shares of U.S. Manufactures Exports, by Destination, 1981 & 1988 (Percent of Total)

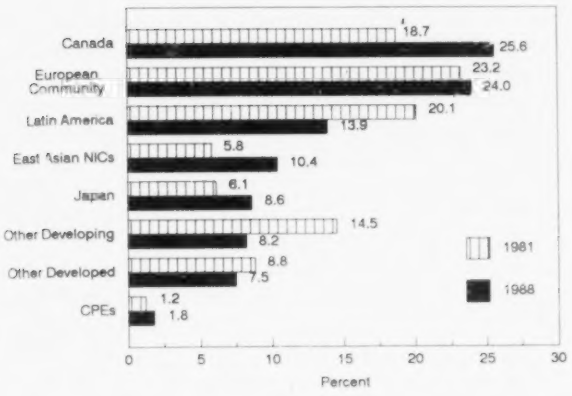


Figure 4.4

Shares of U.S. Manufactures Imports, by Origin, 1981 & 1988 (Percent of Total)

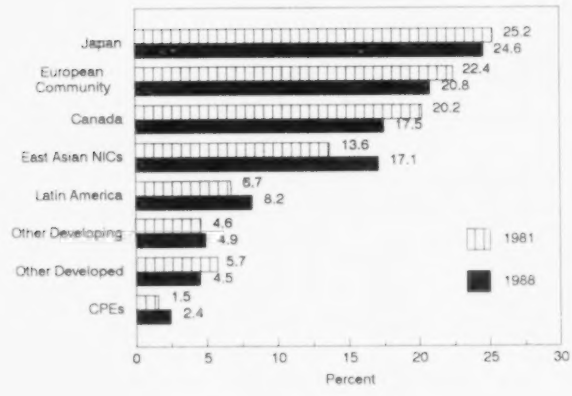


Figure 4.5

Largest Changes in U.S. Manufactures Bilateral Balances, 1987-88

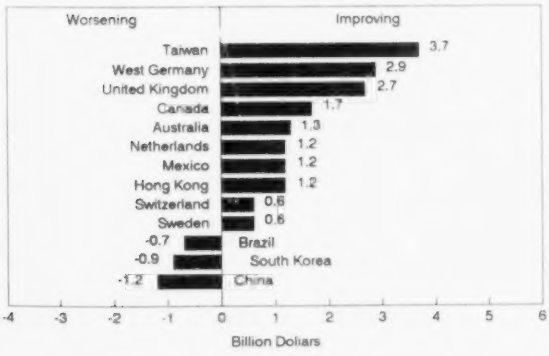
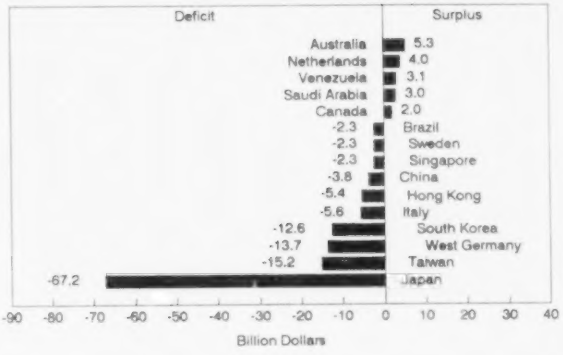


Figure 4.6

Largest U.S. Surplus & Deficit Manufactures Bilateral Balances, 1988



$52.1 billion in 1988 (Figure 4.7). This improvement marked the first decline in the U.S.-Japan deficit in the past nine years. Exports to Japan expanded by 35 percent, while imports grew at a much slower 6 percent. Nevertheless, since U.S. imports from Japan are so much larger than U.S. exports to Japan, the $4.3 billion 1988 deficit reduction was proportionately small.

Despite Japan taking an increasing share of total U.S. manufactures exports over the past few years – reaching 9 percent in 1988 – the composition of U.S. trade with Japan remains very unbalanced. Manufactures were only 58 percent of 1988 U.S. exports to Japan, while the remainder was largely agricultural goods and primary commodities (Figure 4.8). In contrast, virtually all U.S. imports from Japan consisted of manufactured goods. Nevertheless, the manufactures' share of Japan's purchases of U.S. exports in 1988 was far larger than the 43 percent in 1980.

Figure 4.7

U.S. – Japan Trade 1975-88

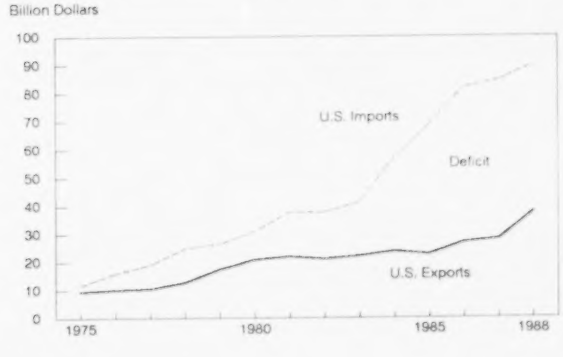
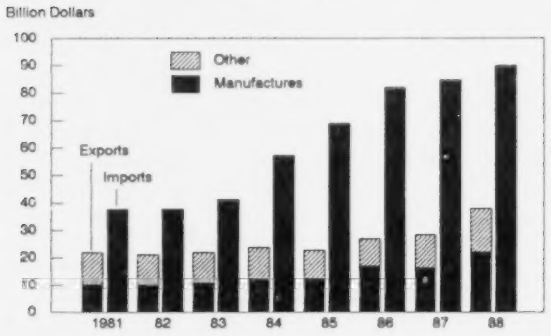


Figure 4.8

U.S. Trade with Japan, 1981-88 (Manufactures & Other Goods)



Manufactures Trade

The 1988 deficit in U.S. manufactures trade with Japan was virtually unchanged from 1987's record shortfall of $67.6 billion. The increase in U.S. imports from Japan in 1988 was a moderate 6 percent; however, large increases occurred in U.S. purchases of Japanese computers, other ADP equipment and parts, and electronic components (Table 4.2).

Automobile imports from Japan dropped by $1.7 billion – a small but significant 8 percent decline. An even larger 25 percent drop was reported for special purpose motor vehicles. Analysts attribute these declines to voluntary Japanese constraints on their auto shipments to the United States, as well as rapidly escalating U.S. prices for these imports due to post-1985 dollar depreciation. Decisions by Japanese auto makers to build and assemble their autos in the United States was reflected in large increases in U.S. imports of Japanese automotive parts and components, which rose by $1.8 billion in 1988.

U.S. manufactures exports to Japan surged by 35 percent in 1988, the largest such increase in the 1980s. U.S. shipments to Japan were up in most major categories of manufactures, particularly for computers and computer parts. Computer equipment became the third largest category of Japanese purchases from the United States in 1988, growing by 59 percent over 1987 levels.

The deficit in U.S.-Japan high-tech trade worsened slightly in 1988, increasing from $21.1 billion in 1987 to

Table 4.2

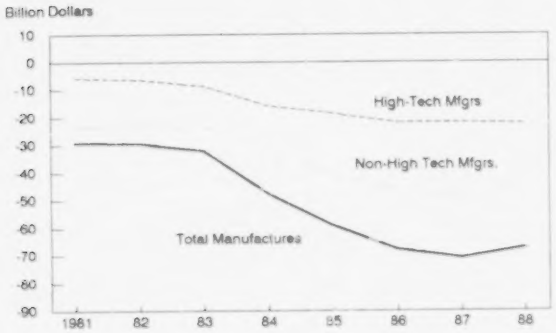
U.S.-Japan Trade in Selected Commodities, 1987-88 (Millions of dollars)

	1987	1988	1987-88 Change Value	1987-88 Change Percent
U.S. Imports, Total (general, customs value.)	**$84,575**	**$89,802**	**$5,227**	**6.2**
Manufactures, total	83,914	89,151	5,237	6.2
Autos	21,872	20,210	-1,662	-7.6
Parts for office & ADP machines	3,684	4,782	1,098	29.8
Motor vehicle parts	3,734	4,633	899	24.1
Telecommunications equipment	3,905	4,056	151	3.9
ADP machines	3,490	3,865	375	10.7
Electronic components & parts	2,190	3,598	1,408	64.3
Phonographs, TVs & sound recording equipment	4,069	3,564	-505	-12.4
Special purpose motor vehicles	4,170	3,141	-1,029	-24.7
Radios (incl. with phono or tape recorder)	2,147	2,453	306	14.3
Electrical machinery	1,886	2,266	380	20.1
Piston engines	1,389	1,908	519	37.4
U.S. Exports, Total (domestic & foreign, f.a.s.)	**28,249**	**37,732**	**9,483**	**33.6**
Corn	1,036	1,616	580	56.0
Meat	882	1,345	463	2.5
Wood logs, poles & posts	1,129	1,340	211	18.7
Fish	728	1,125	397	54.5
Soybeans & other oilseeds	802	1,045	243	30.3
Pulp & waste paper	573	798	225	39.3
Manufactures, total	16,320	21,964	5,644	34.6
Aircraft, spacecraft & parts (excl. engines)	1,907	2,173	266	13.9
ADP machines	877	1,395	518	59.1
Parts for office & ADP machines	934	1,191	257	27.5
Measuring & checking instruments	782	1,119	337	43.1
Electronic components & parts	649	962	313	48.2
Organic chemicals & products	779	912	133	17.1
Medicinal & pharmaceutical products	684	825	141	20.6
Aluminum & aluminum wrap	359	741	382	106.4

$22.3 billion, with U.S. exports to Japan jumping by 28 percent while imports rose much slower at 12 percent. The U.S. deficit in high-tech trade with Japan usually accounted for a large share of the overall bilateral trade deficit and in 1988 accounted for 43 percent of the total deficit, up from 37 percent in 1987 (Figure 4.9).

Figure 4.9

U.S. Trade Deficits with Japan in High-Tech & Other Manufactures, 1981-88



East Asian NICs

Total Trade

For the first time in the 1980s, the U.S. trade deficit with the four East Asian NICs decreased by 17 percent to $28.4 billion from $34.1 billion in 1987. U.S. exports grew by $11.3 billion, more than double the $5.7 billion expansion in U.S. imports from these countries (Figure 4.10). About 22 percent of the U.S. export increase was accounted for by a $2.5 billion increase in the sale of non-monetary gold to Taiwan, a transaction which is unlikely to be significantly repeated in subsequent years.

The four East Asian NICs have become major trading partners of the United States. Their collective share of U.S. exports rose from 7 percent in 1980 to 11 percent in 1988, while their share of U.S. imports nearly doubled from 7 to 14 percent.

Manufactures Trade

Roughly three-quarters of U.S. exports to, and 98 percent of imports from the Asian NICs are manufactured goods. The high-tech goods share of this manufactures trade has been increasing – accounting for 33 percent of U.S. manufactures exports and U.S. imports in 1988. U.S. high-tech purchases from the Asian NICs reached $21 billion – far exceeding similar purchases from the European Community and Canada of $18.1 billion and $7.4 billion, respectively, but well below the $33.2 billion from Japan (Figure 4.11).

Figure 4.10

U.S. Trade with East Asian NICs, 1981-88 (Manufactures & Other Goods)

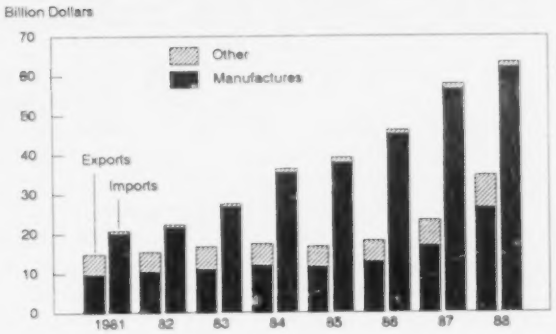
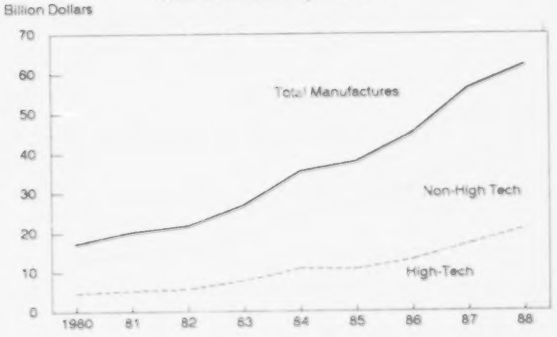


Figure 4.11

U.S. Imports from East Asian NICs, High-Tech & Non-High Tech Manufactures, 1980-88



Passenger cars produced in South Korea have become an important U.S. import from the Asian NICs – growing from $9.6 million in 1985 to $2.1 billion in 1987 and to $2.5 billion in 1988. Passenger automobiles were the largest import from South Korea in 1988. Other important manufactures from the Asian NICs include footwear, electronic components, parts and components of office machines, and clothing (Table 4.3). Many U.S. firms have taken advantage of lower labor costs by establishing offshore plants in the Asian NICs and other developing countries to process and assemble materials from the United States for reexport to the United States.

Canada

Total Trade

Canada continued to be the United States' largest trading partner in 1988, with an estimated $152.4 billion in merchandise flowing over the two nations' common border. This is the largest bilateral trading relationship in the world, with U.S. exports to Canada at $70.9 billion and

U.S. imports at $81.5 billion in 1988. Canada continued to be the largest destination for U.S. exports, although the Canadian share of total U.S. exports declined to 22 percent in 1988 from 24 percent in 1987. Prior to 1986, Canada had been the largest supplier of U.S. imports and since then has ranked second only behind Japan.

The U.S. trade deficit with Canada declined three years in a row from a high of $15.7 billion in 1985 to $10.6 billion in 1988, a 32 percent drop. As in previous years, much of the trade flow in both directions involves motor vehicles and components, which are governed by the 1965 Automotive Products Trade Agreement (APTA) between the United States and Canada. The United States did register a small manufactures trade surplus in 1988, but the non-manufacturing deficit posted was far larger, resulting in the large overall total trade deficit.

Manufactures Trade

For a number of years, a large share of U.S. exports to Canada has not been classified by commodity – roughly 14 percent of the 1988 total – as no export documentation exists. These undocumented U.S. exports have comprised a large and growing component of total U.S. shipments to Canada and their estimated value, based largely on Canadian import documentation, is reported by the U.S. Census Bureau in the aggregate as "other exports". In this report, these undocumented exports are classified wholly as manufactured goods, although probablyat least a small share of these exports actually are agricultural, mining and other nonmanufactured goods. In 1988, for the second year in a row, the United States posted a surplus in manufactures trade with Canada. After three straight years of deficits from 1984 to 1986, the account improved to a $377 million surplus in 1987 and a $2.0 billion surplus in 1988 (Figure 4.12). Trade in motor vehicles and components continued as the largest sector of U.S.-Canadian trade, accounting for about one-third of the total bilateral trade in 1988 (Figure 4.13). About 95 percent of that automotive trade is duty free under APTA.

Since the U.S. and Canadian economies are well integrated, some 90 percent of Canada's manufactures exports and a very large portion of its total manufactures output go to the United States. Conversely, about one-fourth of all U.S. manufactures exports go to Canad .

Table 4.3

U.S.-East Asian NICs Trade in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	Percent
U.S. Imports, Total (general, customs value)	**$57,664**	**$63,231**	**$5,567**	**9.7**
Manufactures, total	56,268	62,004	5,736	10.2
Footwear	4,291	4,782	491	11.4
Parts for office & ADP machines	2,947	3,979	1,032	35.0
Electronic components & parts	2,209	3,284	1,075	48.7
Telecommunications equipment	2,643	2,972	329	12.4
Toys & sporting goods	3,440	2,933	-507	-14.7
Outerwear apparel	2,770	2,868	98	3.5
ADP machines	2,106	2,723	617	29.3
Autos	2,072	2,504	432	20.8
Sweaters	2,858	2,502	-356	-12.5
Phonographs & televisions	1,218	1,548	330	27.1
Rubber & plastic articles	1,327	1,373	46	3.5
U.S. Exports, Total (domestic & foreign, f.a.s.)	**23,547**	**34,881**	**11,334**	**48.1**
Corn	617	899	182	45.7
Hides & Skins	791	845	54	6.8
Soybeans & other oilseeds	613	738	125	20.4
Tobacco manufactures	468	630	162	34.6
Pulp & waste paper	490	615	125	25.5
Cotton	473	544	71	15.0
Manufactures, total	17,020	26,582	9,562	56.2
Non-monetary gold	587	3,074	2,487	423.7
Electronic components & parts	2,017	2,743	726	36.0
Parts for office & ADP machines	1,260	1,832	572	45.4
Organic chemicals & products	1,082	1,493	405	37.4
Aircraft, spacecraft & parts (excl. engines)	1,108	1,423	315	28.4
Synthetic resins, rubber & plastics	813	1,195	382	47.0
ADP machines	631	9 21	290	46.0
Telecommunications equipment	626	781	155	24.8
Measuring & checking instruments	544	695	151	27.8

Figure 4.12

U.S. Trade with Canada, 1981-88 (Manufactures & Other Goods)

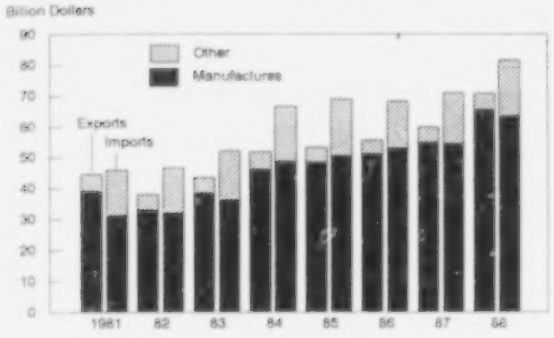
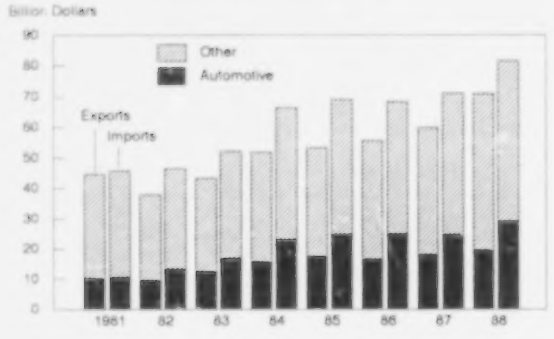


Figure 4.13

U.S. – Canada Trade in Automotive & Other Products, 1981-88 (Exports & Imports, f.a.s.)



The United States is also a major market for Canadian crude materials, including petroleum products and natural gas (Table 4.4).

The United States-Canada free trade agreement, first proposed in 1985, was ratified by both countries' national legislatures and signed into law by the U.S. and Canadian chief executives in 1988. The agreement covers major aspects of the two countries' bilateral trade relations, including customs regulations, investment, export subsidies, and standards. The implementation of this agreement should see a rapid increase in U.S.-Canadian trade flows over the next few years. (For more information, see the special topic on the agreement in the Appendix.)

Latin America

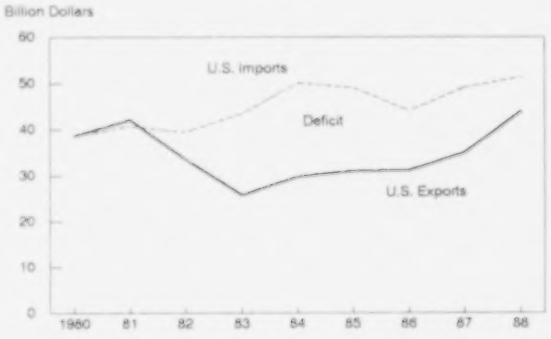
Total Trade

Over the past few years, many Latin American countries (Central and South America and the Caribbean) have faced severe international debt-servicing problems. These debt problems have forced many of them to cut back on imports and mount export drives. Nevertheless, U.S. exports to this region in 1988 grew by 25.6 percent to a new record level of $42.1 billion, passing their prior peak reached in 1981 of $41.9 billion. The share of total U.S. exports sold to Latin America was 14 percent in 1987 and 1988, but still below their 1980 export share of 17 percent.

U.S. imports from Latin America also expanded in 1988, but by a relatively modest 9 percent to $51.3 billion. Latin America's share of U.S. imports remained unchanged from their 1987 level at 12 percent, which is still well below the 15 percent in 1980. The much larger increase in U.S. exports to, than imports from Latin America in 1988 reduced the U.S. deficit with that region by $4.5 billion – falling from a $11.9 billion in 1987 to $7.4 billion in 1988 (Figure 4.14).

Figure 4.14

U.S. Trade with Latin America, 1978-88



This surge in U.S. exports improved the U.S. trade balance with the region. The deficit with Mexico – the largest U.S. trading partner in the region and fourth largest worldwide – was more than halved, dropping from $5.7 billion in 1987 to $2.6 billion in 1988. This is the lowest U.S. deficit with Mexico since the bilateral balance began to run negative in 1982. The 41.6 percent increase in 1988 U.S. exports to Mexico swamped the 14.8 percent rise in U.S. imports. Nevertheless, a substantial deterioration in U.S. trade balances occurred with Argentina and Brazil.

The composition of U.S. trade with Latin America is rapidly changing, with manufactures increasing in importance. In 1980 about 23 percent of U.S. imports were manufactures; the share rose to 49 percent by 1987 and jumped to 58 percent in 1988 (Table 4.5). The share of manufactures in total U.S. exports to the region has risen much more slowly in recent years, rising from 80.8 percent in 1987 to 81.3 percent in 1988, but remains well above the manufactures share of total U.S. imports from the region.

Table 4.4

U.S.-Canada Trade in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	Percent
U.S. Imports, Total (general, customs value)	**$71,085**	**$81,496**	**$10,411**	**14.6**
Crude petroleum	3,392	2,997	-395	-11.6
Wood products	3,112	2,978	-134	-4.3
Pulp & waste paper	1,878	2,274	396	21.1
Natural gas	2,166	2,233	67	3.1
Manufactures, total	54,360	63,355	8,995	16.5
Autos	10,257	13,344	3,087	30.1
Paper & paperboard	5,025	5,651	552	12.5
Parts of motor vehicles	5,152	5,532	377	7.4
Special purpose motor vehicles	3,725	4,261	536	14.4
Aluminum	1,546	2,022	476	30.8
Internal combustion piston engines	1,156	1,381	225	19.5
Aircraft, spacecraft & parts (excl. engines)	1,116	1,277	161	14.4
Furniture & parts	1,030	1,139	109	10.6
Motor vehicle bodies & chasses	782	1,094	312	39.9
U.S. Exports, Total (domestic & foreign, f.a.s.)	**59,814**	**70,862**	**11,048**	**18.5**
Coal	670	806	136	20.3
Manufactures, total	54,737	65,400	10,663	19.5
Motor vehicle bodies & chasses	7,105	8,013	908	12.8
Autos	5,769	6,310	541	9.4
Internal combustion piston engines	1,980	2,249	269	13.6
Trucks & special purpose motor vehicles	1,853	1,835	-18	-1.0
Parts of office & ADP machines	1,615	1,521	-94	-5.8
ADP machines	1,421	1,516	95	6.7
Synthetic resins & plastics	941	1,060	119	12.6
Aircraft, spacecraft & parts (excl engines)	711	1,382	671	94.4
Electronic components	696	1,193	497	71.4
Undocumented exports *	6,429	8,835	2,406	37.4

* No commodity detail is available; reported by the U.S. Census Bureau under Schedule E, Section 9.

Manufactures Trade

Since 1981 the U.S. manufactures trade surplus with Latin America has shrunk nearly every year, falling from a $23.2 billion to $4.5 billion in 1987. However, in 1988 this trend reversed, as the surplus rose by 33 percent to $6.1 billion (Figure 4.15).

The United States was able to maintain its manufacturing trade surpluses with most of the countries in Latin America in 1988, improving them with several major trading partners, including Chile, Columbia, Ecuador, Mexico and Venezuela. The U.S. manufactures trade deficit with Mexico improved dramatically in 1988, shrinking from $1.5 billion in 1987 to a $355 million in 1988. This improvement more than offset the U.S. manufactures trade deterioration with Brazil, the second largest U.S. trading partner in Latin America, with the deficit rising from $1.6 billion in 1987 to $2.3 billion in 1988.

Much of the U.S. trade with Mexico consists of exports and imports of items governed by U.S. Tariff Schedules

Figure 4.15

U.S. Trade with Latin America, 1981-88
(Manufactures & Other Goods)

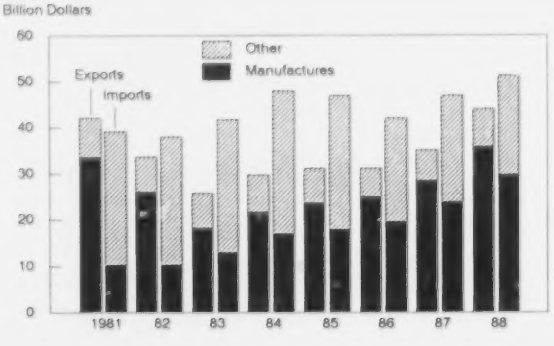


Table 4.5

U.S.-Latin America Trade in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	Percent
U.S. Imports, Total (general, customs value)	**$46,869**	**$51,272**	**$4,403**	**9.4**
Crude petroleum	7,851	6,371	1,480	18.9
Refined petroleum products	4,580	4,489	-91	-2.0
Coffee	2,210	1,942	268	12.1
Fruits & nuts	1,387	1,463	76	5.5
Shellfish	1,286	1,150	136	10.6
Manufactures, total	23,717	29,637	5,920	25.0
Autos	1,416	1,613	197	13.9
Internal combustion piston engines	1,175	1,290	115	9.8
Electrical wiring & other distribution equipment	1,044	1,280	236	22.6
Motor vehicle parts	954	1,250	296	31.0
U.S. Exports, Total (domestic & foreign, f.a.s.)	**34,979**	**43,919**	**8,940**	**25.6**
Refined petroleum products	1,130	957	173	15.3
Corn	459	573	114	24.8
Soybean & other oilseeds	495	565	70	14.1
Manufactures, total	28,262	35,703	7,441	26.3
Motor vehicle bodies & chassis	2,030	2,500	470	23.2
Aircraft, spacecraft & parts (excl. engines)	1,408	1,528	120	8.5
Telecommunications	1,106	1,430	324	29.3
Organic chemicals and products	1,172	1,398	226	19.3
Synthetic resins & plastics	1,049	1,371	322	30.7
Parts of office & ADP machines	831	1,051	220	26.5
Internal combustion piston engines	849	1,014	165	19.4
Electronic components & parts	743	945	202	27.2
Electrical apparatus	640	898	258	40.3

806.30 and 807.00, under which U.S. exports that undergo further processing or assembly abroad (as in Mexico) can reenter the United States with import duties imposed only on the foreign value-added of the product. U.S. firms have found this arrangement very helpful in their efforts to contain production costs and retain their competitiveness in their domestic and foreign markets.

European Community

Total Trade

In 1988, a major improvement occurred in the U.S. trade balance with the European Community (EC), as the $20.6 billion 1987 deficit was more than halved to $9.1 billion in 1988. This is the lowest U.S. deficit recorded with the EC since the balance shifted into deficit in 1984. The 1988 deficit remains primarily due to a very large shortfall with the West Germany and with smaller negative balances recorded for Denmark, France, and Italy. The United States posted trade surpluses with the other eight EC members in 1988, with the 1987 $3.2 billion shortfall with the United Kingdom shifting to a $362 million surplus in 1988 – the first positive U.S. balance with the United Kingdom since 1980.

During the past nine years, the EC collectively has consistently been among the largest U.S. trading partner groups, taking between 25 and 30 percent of U.S. merchandise exports, while accounting for between 19 and 24 percent of U.S. imports.

Manufactures continues to be the dominant component of U.S. trade with the EC, with the manufactures share of the total bilateral trade up in both directions – rising to 85 percent of the total in 1988 from 75 percent in 1980 (Table 4.6). Conversely, agricultural goods' share of the total trade in 1988 was down in both directions from 1980, with the 1988 share of U.S. exports to the EC at 10 percent and the import share at 5 percent in 1988 (Figure 4.16).

Manufactures Trade

The U.S. manufactures trade deficit with the EC peaked in 1986 at $25.5 billion and declined by 40 percent in 1988 to $14.0 billion from $23.3 billion in 1987. The 28.1 percent growth in 1988 exports to this region was paced by large increases in sales of aircraft, computers and ADP equipment, and electronic components. U.S. manufactures export growth far outstripped the 5.8 percent rise in U.S. purchases of manufactures from the EC.

[&aOH

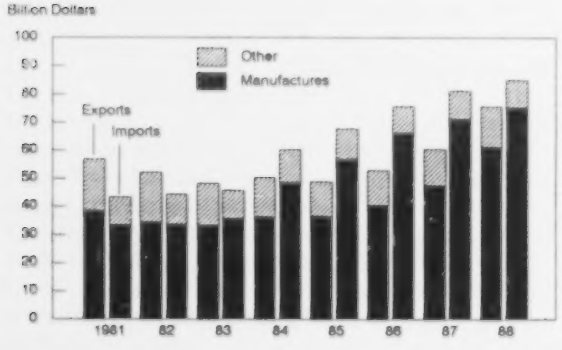
Table 4.6

U.S.-European Community Trade in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	Percent
U.S. Imports, Total (general, customs value)	**$81,188**	**$84,942**	**$3,754**	**4.6**
Beverages, alcoholic	2,408	2,464	56	2.3
Refined petroleum products	1,938	2,262	336	17.3
Crude petroleum	2,071	1,392	-679	-32.8
Manufactures, total	71,186	75,337	4,151	5.8
Autos	10,897	8,070	-2,827	-25.9
Organic chemicals & products	2,930	3,733	803	27.4
Aircraft, spacecraft & parts (excl. engines)	2,570	3,045	475	18.5
Parts of motor vehicles	2,277	2,626	349	15.3
Specialized industrial machinery	1,641	1,932	291	17.7
Parts of internal combustion engines	1,579	1,890	311	19.7
Precious & semiprecious stones & pearls	1,300	1,618	318	24.5
Measuring & checking instruments	1,188	1,389	201	16.9
Non-electric machinery parts	1,112	1,366	254	22.8
Footwear	1,435	1,357	-78	-5.4
Iron & steel plates and sheets	1,227	1,348	121	9.9
Jewelry	1,205	1,266	61	5.1
U.S. Exports, Total (domestic & foreign, f.a.s.)	**60,575**	**75,871**	**15,296**	**25.3**
Soybean & other oilseeds	2,152	2,059	-93	-4.3
Coal	1,279	1,631	352	27.5
Animal feedstuffs	1,517	1,430	-87	-5.7
Manufactures, total	47,884	61,358	13,474	28.1
Aircraft, spacecraft & parts (excl. engines)	4,979	6,194	1,215	24.4
Parts for office & ADP machines	4,425	5,694	1,269	28.7
ADP machines	4,198	5,199	1,001	23.8
Internal combustion engines	2,230	2,902	672	30.1
Measuring & checking instruments	2,108	2,539	431	20.4
Organic chemicals & products	1,726	2,001	275	15.9
Electronic components & parts	1,216	1,858	642	52.8
Medicines	1,278	1,701	423	33.1
Synthetic resins & plastics	1,290	1,625	335	26.0

Figure 4.16

U.S. Trade with the EC, 1981-88
(Manufactures & Other Goods)



OPEC

The U.S. trade deficit with the 13 OPEC countries declined from $13.3 billion in 1987 to $9.2 billion in 1988—approximately the same magnitude as the 1986 shortfall. U.S. exports to this region grew by 30 percent in 1988, the first yearly increase in sales to OPEC since 1981 (Figure 4.17). Imports fell by a modest 4 percent, paced by a $1.2 billion decline in U.S. imports of crude petroleum, the largest individual import category. U.S. imports from the OPEC countries are mainly crude oil and petroleum products, while most U.S. exports to these countries are manufactures (Table 4.7).

A combination of lower oil prices and smaller U.S. purchases of crude petroleum and petroleum products from OPEC over the last few years has greatly reduced the U.S. deficit with the group from a 1980 high of $34.9 billion. However, incomes from petroleum exports have dwindled during the 1980s, causing OPEC countries to cut back purchases of goods from other countries, including U.S. products. Although U.S. exports to this

Table 4.7

U.S.-OPEC Trade in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	1987-88 Change Percent
U.S. Imports, Total (general, customs value)	**$23,953**	**$23,066**	**-$887**	**-3.7**
Crude petroleum	15,054	13,883	-1,171	-7.8
Refined petroleum products	4,981	4,926	-55	-1.1
Natural rubber	423	604	181	42.8
Shelfish	420	441	21	5.0
Wood veneer & plywood	356	334	-22	-6.2
Manufactures, total	1,766	1,900	134	7.6
U.S. Exports, Total (domestic & foreign, f.a.s.	**10,612**	**13,820**	**3,208**	**30.2**
Animal feedstuffs	270	569	299	10.7
Wheat	431	471	40	9.3
Rice	199	340	41	70.9
Manufactures, total	7,696	9,943	2,247	29.2
Autos	435	742	307	70.6
Civil engineering & contractors equipment	447	576	129	28.9
Aircraft, spacecraft & parts (excl. engines)	477	509	32	6.7
Motor vehicle bodies and chasses	436	482	46	10.6
Resins, rubber & plastic materials	271	343	72	26.6
Telecommunications equipment	339	320	-19	-5.6

group did rise substantially in 1988, they are still far below their $21 billion export peak in 1981.

Centrally Planned Economies

U.S. exports to the centrally planned economies (CPEs)—the Soviet Union, seven countries of Eastern Europe, China, and six other Asian countries—jumped by over 52 percent in 1988, as U.S. sales increased substantially to all these countries except Hungary. The share of U.S. total trade accounted for by the CPEs is small. Their share of U.S. exports rose from 2.3 percent in 1987 to 2.7 percent in 1988 and their share of U.S. imports rose from 2.0 to 2.4 percent. This greater rise in exports than imports reduced U.S. deficits with the CPEs from $2.5 billion in 1987 to $2.0 billion in 1988 (Table 4.8).

China continued as the major U.S. trading partner within the CPE group, although its share of those U.S. exports dropped from 61 percent in 1987 to 58 percent in 1988 (Figure 4.18). However, its share of the CPEs' sales to the United States rose to a historic high, accounting for roughly four-fifths of all purchases from this group. The trade deficit with China rose by 24 percent to $3.5 billion in 1988—the ninth largest U.S. bilateral deficit in 1988.

U.S. trade with the Soviet Union in 1988 grew even more rapidly than with China. U.S. exports to the U.S.S.R.

Figure 4.17

U.S. Trade with OPEC, 1981-88
(Manufactures & Other Goods)

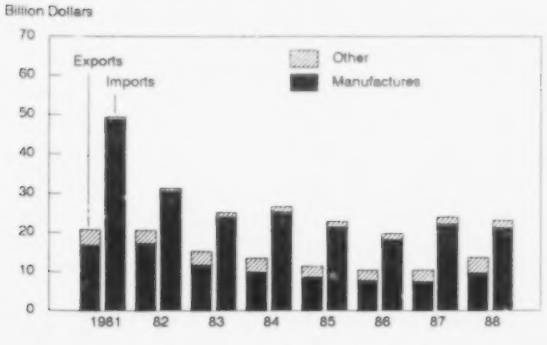


Figure 4.18

U.S. Trade with Centrally Planned Economies, 1981-87
(China & Other CPEs)

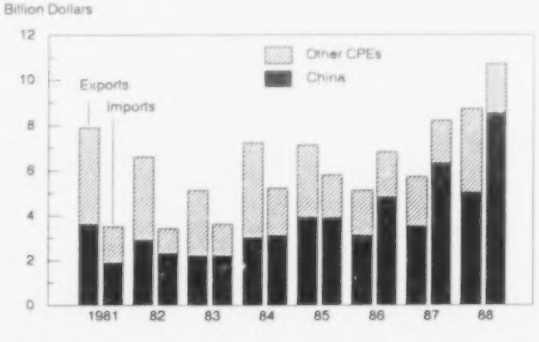


Table 4.8

U.S. Trade with Centrally Planned Economies in Selected Commodities, 1987-88
(Millions of dollars)

	1987	1988	1987-88 Change Value	1987-88 Change Percent
U.S. Imports, Total (general, customs value)	**$8,219**	**$10,625**	**$2,406**	**29.3**
Refined petroleum products	596	604	5	0.8
Crude petroleum	353	385	32	9.1
Manufactures, total	6,467	8,659	2,192	33.9
Toys & sporting goods	722	1,081	359	49.7
Outerwear apparel	736	739	3	0.4
Sweaters	563	507	-56	-9.9
Flat made-up textile articles	360	448	88	24.4
U.S. Exports, Total (domestic & foreign, f.a.s.)	**5,723**	**8,711**	**2,988**	**52.2**
Wheat	596	1,556	960	261.1
Corn	529	1,000	471	89.0
Lumber	165	438	273	265.5
Soybeans & other oilseeds	220	31	11	5.0
Manufactures, total	3,622	4,470	848	23.4
Fertilizer	540	622	82	15.2
Synthetic resins & plastics	261	608	347	233.0
Aircraft, spacecraft & parts (excl. engines)	486	338	-148	-30.5
Organic chemicals & products	170	303	133	43.9
Measuring and checking instruments	229	245	16	7.0
Specialized industrial machinery	164	229	65	39.6

expanded by 87 percent from 1987 levels. Imports from the U.S.S.R. rose by a more moderate 36 percent. The U.S. trade surplus with the U.S.S.R. more than doubled, from less than $1.1 billion in 1987 to $2.2 billion in 1988. Nearly all of the U.S. export growth reflected increased shipments of agricultural products.

Summary

The U.S. trade performance with most trading partners sharply improved in 1988. These gains are primarily attributable to the surge in U.S. exports to most of these countries. Export growth ranged as high as 34 percent to Japan and 48 percent to the East Asian NICs. Imports from most countries continued at a low growth rate. Trade with the European Community accounted for over one-third of the improvement in the overall U.S. trade balance and one-half of the improvement in the manufactures balance.

Improvement in U.S. trade balances with individual countries was widespread. This indicates that these gains stemmed primarily from improved price competitiveness of U.S. goods made possible by the post-1985 dollar devaluation. Continued retention of current U.S. market shares will depend on retaining recently gained U.S. price advantages. Moreover, despite large overall trade balance improvement, continued worsening occurred in high-tech trade balances with Japan and the East Asian NICs, reflecting the rising focus of other countries on improving their competitiveness in high-technology goods.

A number of countries continued to rely heavily on exports as a source of economic growth. Among these, four – Japan, West Germany, South Korea, and Taiwan – accounted for 70 percent of the U.S. trade deficit. At the same time, these same four countries accounted for the largest share of the net U.S. capital imports needed to pay for U.S. trade deficits.

5

U.S. BUSINESS SERVICES TRADE

U.S. trade in business services has long been a positive factor in o rall U.S. current account performance. The 1988 busine s services surplus of $19 billion was a major improvement – an increase of $7 billion from the 1987 level. However, trends in business services trade in recent years have been swamped by larger developments in the merchandise trade account.

Defining Business Services

Private sector service industries – businesses primarily involved in providing services as opposed to goods – accounted for nearly two-thirds of the U.S. GNP in 1987, while manufacturing – the production of most goods – provided about one-fifth of total GNP. In contrast, the services sector accounts for a far smaller share of U.S. international commercial transactions than GNP. Only a relatively small portion of the business services produced by the private sector is bought and sold internationally.

Internationally traded business services are grouped in this report into three categories: travel and transportation, proprietary rights, and other business services (Figure 5.1).[1] Not included is investment income (interest on loans, profit and dividend remittances from foreign affiliates to parent firms), which is sometimes included in the broad category of "services" in balance-of-payments accounting, but is not a measure of business services.

U.S. and foreign international business services trade data are generally not as comprehensive, detailed, and accurate as merchandise trade data, largely because transactions in intangible services are more difficult to monitor than cross-border movements of goods. Indeed, data on business services trade are often estimates derived from sampling of receipts and payments for

[1] The terms used in this report to identify types of internationally traded business services generally follow those used in U.S. balance-of-payments reporting. The major exception is the category "proprietary rights," which is reported as fees and royalties in balance-of-payments terminology. The category "other business services" used herein is equivalent to other private services in U.S. balance-of-payments terminology.

Figure 5.1

Types of Business Services in International Trade

Travel and Transportation

- Travel: Services provided to U.S. citizens traveling abroad (U.S. imports) and to foreigners visiting the United States (U.S. exports).
- Passenger Transportation: Transportation provided by foreign carriers to U.S. residents for transportation abroad (U.S. imports) and by U.S. carriers to foreign residents (U.S. exports).
- Shipping Transportation: Services involving freight movements and use of port facilities.

Proprietary Rights

- The use and sale of intangible property or rights (for example, fees and royalties paid for the use of copyrights, patents, processes, technology, etc.).

Other Business Services

- Construction, engineering, architecture, consulting, brokerage, communications and reinsurance, the provision of management, professional and technical services, research and development assessments, and other services (for example, allocated overhead expenses; and other miscellaneous receipts and payments.)

NOTE: For more detailed descriptions of these and other types of service categories, see "U.S. International Trade and Investment in Services: Data Needs and Availability." Bureau of Economic Analysis Staff Paper, September 1984 (BEA-SP8-4-041).

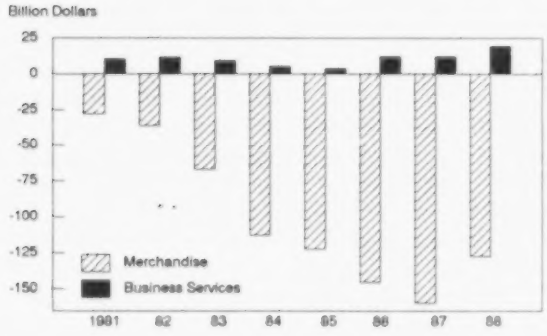
broad categories of services. These estimates are made primarily for balance-of-payments accounting purposes. However, efforts are being made to improve business services trade data. [2]

Overview of U.S. Business Services Trade

Business services trade has been important, but it is much smaller in total and balance than merchandise trade (Figure 5.2). In recent years, business services exports have been about 30 percent as large as merchandise exports; business services imports have averaged only about one-sixth as large as merchandise imports. Business services trade is also a considerably smaller factor in overall current account performance than international investment income, which prior to 1988 provided substantial surpluses. (See Chapter 6 for a more detailed discussion of investment income.)

Figure 5.2

U.S. MERCHANDISE & BUSINESS SERVICES BALANCES, 1981-88 (Balance-of-Payments Basis)

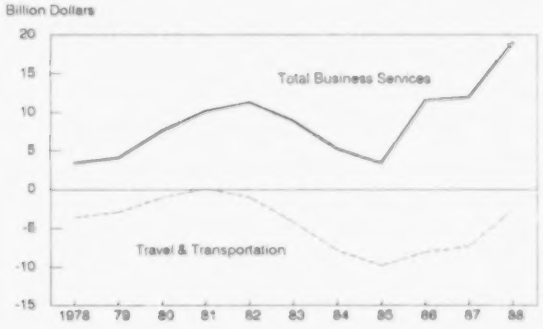


Business services trade tends to be dominated by the large travel and transportation category. Travel and transportation in 1988 accounted for almost 62 percent of total U.S. business services exports and for 82 percent of total business services imports. Proprietary rights (fees and royalties for the use of technology, etc.) provided another 12 percent of business services exports. Exports of other business services were $24.3 billion, about 26 percent of total business services exports, and equivalent to less than 8 percent of U.S. merchandise trade exports. (See the Statistical Appendix for detailed data.)

The United States for many years ran a positive overall trade balance business services, but the surplus declined rapidly between 1981 and 1984 – recording a small surplus of $3.4 billion in 1985 (Figure 5.3). The decline from the prior record surplus of $12.0 billion in 1981 was caused primarily by the very sharp deterioration in the travel and transportation balances. Slippage in this category and in the proprietary rights category more than offset some increases in net receipts from transactions in other business services.

Figure 5.3

U.S. Total Business Services and Travel & Transportation Balances, 1978-88



Responding to the dollar depreciation that began in early 1985, the business services trade surplus expanded to almost $12 billion in 1986 and 1987, and reached a new record of $19.0 billion in 1988. Both exports (receipts) and imports (payments) have advanced strongly since 1985, with receipts rising 62 percent over the three-year period.

The United States is often perceived as having a comparative advantage in internationally traded private business services. But U.S. performance has been strong only in some categories of business services trade, and not all of those categories produce large export receipts. The United States has been very competitive in many of the business activities included in the "other" business services category, including construction, engineering, reinsurance, brokers' commissions, and certain health care services. The amount of trade previously recorded in this category, however, was relatively small and the resulting surplus' contributions to improving the current account were limited. Beginning with data for 1986, a more comprehensive data collection effort – including a more systematic coverage of advertising, accounting, legal, medical, and other kinds of professional services – slightly increased the reported export and import values of "other business services."

[2] A special Benchmark Survey on services trade during 1986 was conducted by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. Results of this survey were published in the October 1988 Survey of Current Business. The survey was conducted pursuant to the amended provisions of the International Investment and Trade in Services Survey Act. BEA expects to update this data annually using sample surveys.

The United States also has traditionally registered large net receipts from transactions involving proprietary rights – fees, royalties, and other receipts derived mostly from long-established relationships between U.S.-based parent firms and their affiliates abroad. Increasingly, however, U.S. firms are buying more foreign technology as the portion of world patents held abroad and in the United States increases.

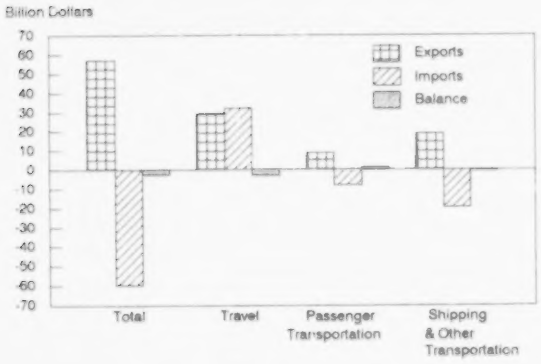
Recent Performance

Travel and Transportation

U.S. trade in travel and transportation services – travel, passenger transportation, and shipping and other transportation – has been typically in deficit, especially in periods marked by a strong dollar and strong growth in the U.S. economy (Figure 5.4).

Figure 5.4

Composition of U.S. Trade in Travel & Transportation Services, 1988



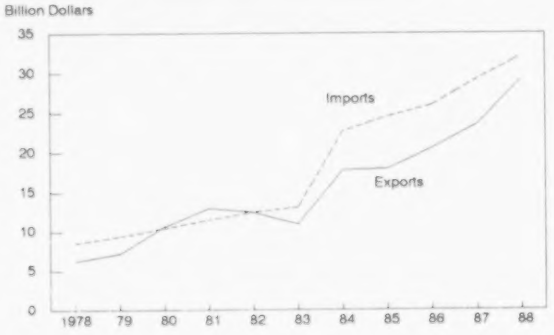
In every year since 1960, except in 1981, the United States experienced combined travel and transportation deficits. In 1988, balances in all three subcategories of travel and transportation improved, and the overall deficit declined to $2.6 billion from $7.3 billion in 1987. The high value of the dollar in the early 1980s played a key role in enlarging this deficit. The strengthening dollar through early 1985 improved the price advantage of tourism services in many foreign countries, especially the major developed nations, but the decline in the dollar exchange rate since then did not result in improvement in the combined travel and transportation balance until 1988.

Travel. The 24 percent growth in 1988 travel service exports – expenditures in the United States by foreign tourists and businesses – resulted in record receipts of $29.2 billion. Import growth (spending abroad by U.S. tourists and business travelers) of 10 percent resulted in record payments to foreigners of $32.1 billion. As a result, the U.S. travel deficit fell from $5.7 billion in 1987 to $2.9 billion in 1988 (Figure 5.5).

Depreciation of the dollar since early 1985 has been a significant factor in the growth in travel service exports since 1985. The dollar decline tended to lower costs for foreigners traveling in the United States and increased U.S. dollar costs for U.S. citizens traveling abroad. Nevertheless, not all travelers were so affected, as more than one-third of U.S. international travel receipts and payments reflect transactions with Canada and Mexico – countries whose currencies remain relatively stable in relation to the U.S. dollar.

Figure 5.5

U.S. Travel Services Exports & Imports, 1978-88



Passenger Transportation. For the first time in recent history the United States recorded in 1988 a surplus on passenger transportation services. The $1.0 billion surplus reversed the $0.5 billion deficit of 1987 and the record $2.4 billion deficit of 1983 (Figure 5.6). U.S. passenger transportation exports – primarily fares paid by foreign residents to U.S. airlines – expanded very slowly during 1981-85 but increased about 25 percent annually over 1985-88. Record 1988 receipts of $8.9 billion were almost double the 1985 total. Passenger transportation imports – primarily fares paid by U.S. residents to foreign airlines – stagnated noticeably in 1986 after many years of consistent gains, increased almost 10 percent in 1987, and increased only 6 percent in 1988 to $7.9 billion.

Two factors strongly affect the balance in this account: the number of U.S. versus foreign travelers and whether they select U.S. or non-U.S. carriers. The 1988 surplus appears to have reflected a substantial increase in the number of foreign residents using U.S. carriers and increases in average fares.

Shipping and Other Transportation. U.S. performance in this category also improved in 1988, as receipts advanced by 11 percent and narrowed the deficit

Figure 5.6

U.S. Passenger Transportation Exports & Imports 1978-88

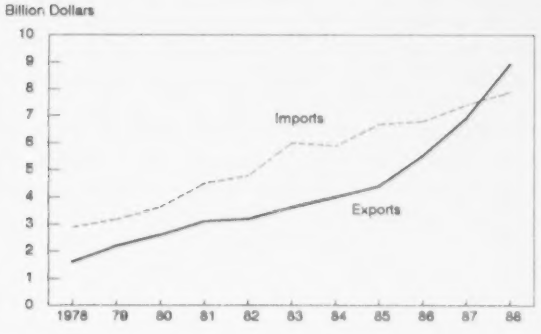
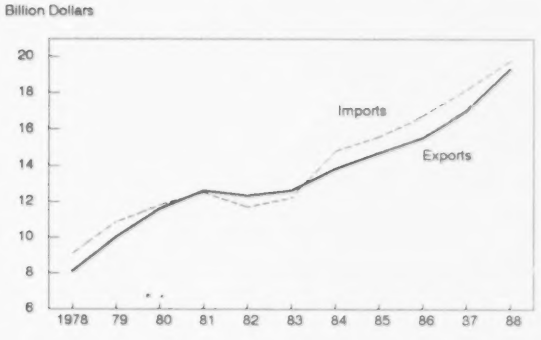


Figure 5.7

U.S. Shipping & Other Transportation Exports & Imports, 1978-88



to $0.7 billion from $1.1 billion in 1987 (Figure 5.7). Five years earlier, in 1983, the United States enjoyed a modest surplus in this category.

Port services provided in the United States to foreign shipping companies and airlines – a U.S. export – have expanded in each of the last six years, consistent with the rapid growth in U.S. merchandise imports.

The growth in U.S. payments for shipping and other transportation was 9 percent in 1988, almost the same as in the previous year. Until 1987, sluggish U.S. export performance had held U.S. payments for port services abroad relatively constant.

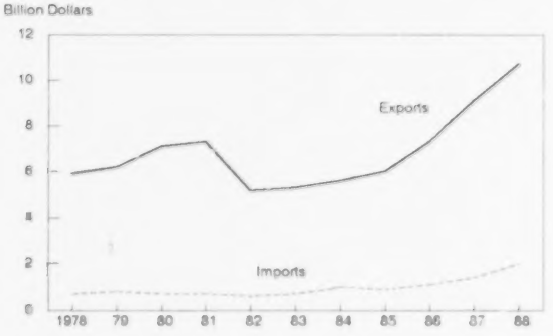
Proprietary Rights

U.S. trade in proprietary rights – shown in U.S. balance-of-payments data as "fees and royalties" – recorded increasing surpluses in each of the last five years. U.S. receipts from exports of proprietary rights increased some 18 percent in 1988, reaching a record $10.7 billion. Some three-fourths of U.S. total receipts come from the foreign affiliates of U.S. multinational corporations (MNCs). U.S. payments for proprietary rights were only $2.0 billion in 1988, resulting in a surplus of about $8.7 billion (Figure 5.8).

The much larger U.S. receipts for exports than payments for imports of proprietary rights largely reflect the long-standing position of the United States as a large net exporter of technology and know-how. The large U.S. surplus also stems from the larger stock and longer established presence of U.S. direct investment abroad compared to foreign direct investment in the United States (FDIUS). As a result of rapid FDIUS growth in recent years, by year-end 1988 the FDIUS exceeded $300 billion in book value – about equal to the book value of U.S. direct investment abroad. But the earning power of U.S. direct investments per dollar of book value is much greater than that of foreign direct investments in the United States. The book value of generally older U.S. direct investments abroad substantially understates their real value compared with the newer direct investments in the United States.

Figure 5.8

U.S. Proprietary Rights Services Exports & Imports, 1978-88



Net payments of fees and royalties by U.S. affiliates to foreign parents have remained very low and have been largely offset by fee and royalty receipts by U.S. affiliates from their parent firms. This indicates that foreign-owned U.S. affiliates are being compensated for substantial amounts of technology and other services sold to their parents abroad.

The modest growth in U.S. receipts for proprietary rights between 1982 and 1985 was consistent with the economic recovery of major foreign economies during that period. The large dollar appreciation over 1981-85 probably reduced the dollar value of these net U.S. receipts that were denominated in currencies that depreciated vis-a-vis the U.S. dollar. Conversely, the far more rapid increase in U.S. receipts since 1985 undoubtedly partly reflected translation into larger

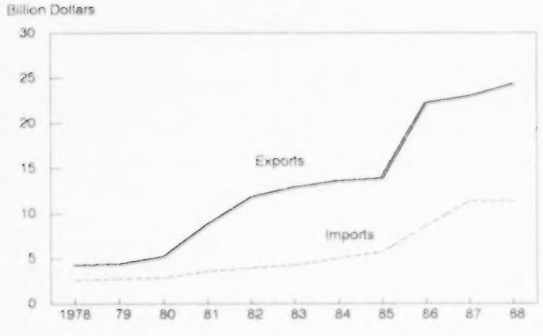
dollar amounts those fees and royalties denominated in major foreign currencies.

Other Business Services

The U.S. surplus in other business services rose $1.4 billion in 1988 to $12.9 billion, but still under the 1986 record surplus of $13.4 billion (Figure 5.9). This category includes professional and other services, in which the United States is often seen as having a strong comparative advantage, as well as management fees paid by affiliates to their parents abroad.

Figure 5.9

Other U.S. Business Services Exports & Imports, 1978-88



U.S. exports of other business services in 1988 totaled $24.3 billion, more than one-fourth of total business service receipts. A significant portion of these export receipts, however, were for "miscellaneous" services – mostly expenditures by foreign governments and international organizations in the United States as well as trade union receipts from Canadian affiliates and expenditures of foreign residents employed in the United States. In 1987, for example, U.S. receipts from exports of communications services, contractors' fees, film rentals, reinsurance and other financial services, management services, commissions, etc. totaled only about $9.0 billion, less than 3 percent of combined merchandise and business services exports. [3]

Moreover, while exports of other business services will likely increase, they are not likely to become a major export earner because the net value added that accrues to the exporting nation from such exports is limited. U.S. receipts from exports of many types of other business services reflect only the net export or the U.S. value-added portion of what may have been much larger sales transactions. The U.S. value added of these exports is limited since much of the gross value of exports of professional and other business services is frequently payments to foreign suppliers and employees and other foreign recipients. Such expenditures do not return to the United States as receipts, holding down the U.S. value added in some business services. For example, only a small portion of the premiums of a large insurance policy sold by a firm located in the United States to a foreign buyer would likely appear as a business services receipt. After deduction of international reinsurance, payments to foreign-based employees, settlement of foreign claims, and similar items, the U.S. "export" recorded in the other business services account would be only a very small portion of the original amount of the insurance premium.

U.S. imports of other business services consist primarily of communications services – about one-third of the 1988 total of $11.4 billion. The United States consistently runs a substantial deficit in communications services trade. In contrast, U.S. affiliates with foreign parents generate net receipts from their parents for management services and other activities – $0.9 billion in 1988.

The Importance of Business Services

As noted above, U.S. business services trade is substantial – $165 billion in two-way trade in 1988 – and continues to grow. But such trade is only about one-fifth as large as U.S. merchandise trade. Moreover, the United States generally records deficits in travel and transportation – the dominant category of business services trade – and long-standing surpluses in proprietary rights may not continue to grow as foreign direct investment in the United States grows more rapidly than U.S. direct investment abroad. Surpluses in other business services are significant, but the balance does not change much year to year relative to changes in the balances for merchandise trade and international investment income.

The 1988 business services trade surplus of $19 billion was small compared to the $127 billion merchandise trade deficit (balance-of-payments basis). Thus, even greatly improved performance in business services trade can only modestly affect the overall U.S. current account performance.

Nevertheless, the United States has an important policy interest in improving the international environment for trade in business services. The General Agreement on Tariffs and Trade (GATT) was created to deal with international trade in merchandise. The GATT has served the international trade community well. Average tariff rates around the world have reached unprecedented low levels. There are, however, significant non-tariff trade barriers that should be reduced or eliminated. The U.S. Government continues to believe that the GATT could provide a good framework for addressing business services trade barriers as well as international direct investment issues.

[3] There are continuing concerns that data collection procedures are believed to result in under reporting of business services trade, particularly for U.S. trade in professional and related services.

The United States is vigorously pursuing business services and international direct investment issues in the Uruguay Round of multilateral trade negotiations. An improved commercial environment for internationally traded services not only benefits U.S. business service exporters, it also benefits the global economy.

Summary

U.S. business services have been actively sharing in the world growth trend in services, as reflected in the substantial improvement in business services trade performance in 1988. Business services have been a rising component of U.S. trade in recent years, in part due to modern technology such as development of a virtual single global capital market fostered by market liberalization, computerization, and satellite transaction transmission. The U.S. business services surplus expanded from $12 billion to $19 billion—reflecting improvement in the balances of all major business services categories. Among these, expanding surpluses in the exchange of proprietary rights and in professional services were complemented by a reduction in the traditional deficit in travel and transportation services.

U.S. business services trade in 1988 clearly benefitted from the combined effects of improved price competitiveness resulting from the post-1985 dollar depreciation, as did merchandise trade. Business services exports surged upward by 16 percent (compared to 27 percent in merchandise trade) and imports grew by 8.3 percent (nearly equal to merchandise import growth). U.S. business services trade has become so large that it now equals the total trade of many nations.

6

THE U.S. CURRENT ACCOUNT, CAPITAL FLOWS, AND INTERNATIONAL INVESTMENT POSITION

The over $30 billion improvement in U.S. merchandise trade performance in 1988 resulted in a somewhat smaller U.S. current account deficit than in 1987. However, the U.S. international debtor position enlarged, mostly as a result of valuation adjustments and a significant change in the statistical discrepancy. The continued deterioration in the U.S. international investment position was the prime factor leading in 1988 to the smallest surplus since 1970 in "invisibles" trade – the sum of nonmerchandise current account items. The continuing growth in the official U.S. debtor position is likely to swing the balance on international investment income to a net payments position in the near future and place an increasing burden on the merchandise and business services accounts to generate further improvement in the current account.

The U.S. current account, the broadest measure of U.S. international transactions, is balanced roughly by offsetting net changes in holdings of U.S. assets by foreign persons and foreign assets held by U.S. persons produced by net changes in international capital flows. In turn, these changes in asset holdings determine changes in the U.S. international investment position (IIP).

In the first half of the 1980s, international capital flows appear to have largely determined, rather than passively reacted to, U.S. trade flows. During that period, via their affect on dollar exchange rates, the increasing foreign demand for U.S. financial and real property assets relative to U.S. demand for foreign assets had a major effect on U.S. trade flows. Since then the direction of cause and effect is less clear – whether the principal determining force has been the change in demand and supply of capital or for goods and services.

The contribution to current account performance by investment income flows, U.S. Government services, and unilateral transfers is given special attention in this chapter; the contribution by merchandise and business services trade was discussed in prior chapters. The relation of changes in current account deficits and international asset holding are also examined.

Current Account, Capital Flows and the IIP

The current account measures a nation's overall balance on specified external transactions during a stated period.[1] Moreover, a current account surplus indicates that a nation is producing more than it is consuming and exporting the difference; a current account deficit means it is consuming more than it is producing and importing the shortfall.

The current account also is a measure of a nation's net borrowing or lending abroad and corresponding international capital flows. Current account deficits require an equal amount of borrowing financed by net capital inflows to the deficit nation; surpluses reflect lending abroad matched by net capital outflows. The resulting net international capital movements change a nation's IIP – the balance of the stock of its international assets and liabilities.

Net borrowing, as reflected in current account deficits and the accompanying net capital inflows, has rapidly transformed the IIP of the United States from the largest creditor position of any nation in 1981 to the largest debtor position of any nation. The 1988 current account deficit was equivalent to 2.6 percent of the U.S. GNP. The accumulated negative net IIP at year-end 1988 reached $532 billion – equal to 11 percent of GNP.

[1] The current account balance is the most inclusive measure of the balance on U.S. international transactions presently compiled by the U.S. Government. It covers the value of exports and imports of merchandise (goods), "services" and unilateral transfers. "Services" here is used in the broad sense, including business services, investment income, and other transactions. In much earlier years, current account items were combined with capital flows in one overall U.S. balance of payments.

Some argue that the current record level of U.S. international debt is not a problem, given U.S. debt servicing abilities. They indicate that U.S. international debt could grow indefinitely, so long as it grows more slowly than a nation's potential debt servicing capacity, which is often seen as related to a country's GNP. That view also argues that as long as this debt continues to be almost wholly denominated in U.S. currency, U.S. international transactions related to U.S. debt have relatively little effect on the value of U.S. currency in foreign markets.

But recent additions to the U.S. debtor position have far outpaced GNP growth, and the debt-to-GNP ratio will continue to rise as long as large current account deficits and increases in the debtor position continue. Large net capital flows into the United States could maintain large trade deficits for some time, but no nation – including the United States – can indefinitely sustain continuing increases in the ratio of external debt to GNP. Moreover, there comes a point at which foreign creditors may become unwilling to maintain U.S. net capital inflows at moderate rates of return.

Composition of the U.S. Current Account

The overall U.S. performance in international transactions can be assessed by examining the five major current account categories: merchandise trade, business services trade, international investment income, "other international transactions," and unilateral transfers.

Throughout most of the post-World War II period the United States experienced current account surpluses generated in large part by positive balances in its merchandise trade (measured on a balance-of-payments basis). The United States ran merchandise trade surpluses every year between 1946 and 1969, accompanied by current account surpluses in all but three of those years (1950, 1953, and 1959). During this period the cumulative merchandise trade surplus approached $100 billion, and the cumulative current account surplus exceeded $55 billion.

U.S. merchandise trade performance deteriorated through the 1970s and into the 1980s, and merchandise trade deficits became the rule. Until 1982, however, positive balances in business services trade and net receipts of investment income offset frequent merchandise trade deficits, so that the cumulative 1970-81 current account balance was slightly positive (Figure 6.1).

But since 1982, U.S. merchandise trade deficits have overwhelmed the much smaller business services trade and international investment income surpluses (Figure 6.2). Moreover, there has been a marked deterioration in recent years in traditionally positive net receipts of investment income, which peaked at $34 billion in 1981, but declined to nearly $2 billion in 1988.

Figure 6.1

U.S. Current Account Balances 1970-88

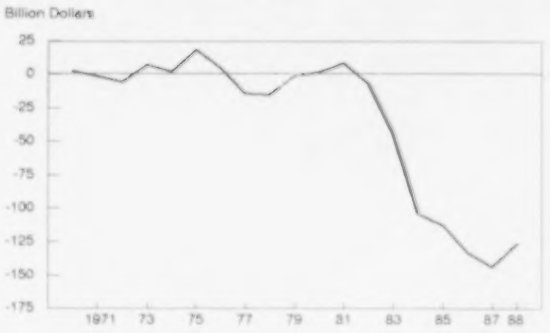
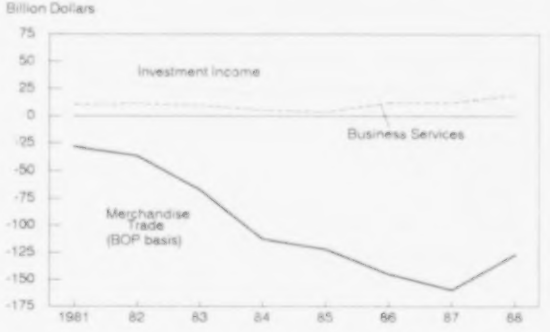


Figure 6.2

U.S. Merchandise & Business Services Trade, and Investment Income Balances, 1981-88



Detailed discussions of developments in U.S. merchandise trade are included in several earlier chapters of this report. Business services trade is reviewed in Chapter 5. In addition to goods and business services trade, the U.S. current account includes three additional primary categories discussed in this chapter – U.S. international investment income, a group of miscellaneous items termed "other transactions," and unilateral transfers (Figure 6.3). A look at these categories provides insights into their contribution to recent current account performance and what role they can be expected to play in the future.

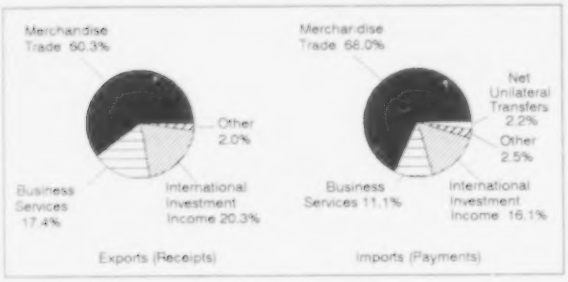
U.S. International Investment Income

U.S. international investment income is the balance of receipts from U.S. holdings of foreign assets and U.S. payments to foreign holders of U.S. assets. The three basic types of income and payments and the forms of international investment assets and liabilities on which they are based are:

- Direct investment income: ownership/control of 10 percent or more of foreign business enterprises (income receipts from U.S. direct investment abroad; and income payments to foreigners for direct investments in the United States);
- Other private investments income: privately held "portfolio" investments (including stocks, bonds, bank deposits, loans, and annuities); income receipts by U.S. holders of foreign portfolio items; and income payments to foreigners on U.S. portfolio items;
- U.S. Government income: income receipts on foreign securities, loans, currency holdings or other assets held by the U.S. Government; and payments by the U.S. Government on foreign-held U.S. Government securities and other liabilities.

Figure 6.3

Major U.S. Current Account Components, 1988



International investment income has become an increasingly important factor in U.S. current account performance. International investment receipts as a proportion of total receipts from international transactions (goods, business services, international investment receipts, and "other transactions") increased from 18 percent in 1977 to 24 percent in 1985, before falling to 23 percent in 1986 and 1987, and to 20 percent in 1988. International investment payments rose from 7 to 16 percent of total transaction payments over the same period. The increasing roles of international investment receipts and payments in the current account reflect the accumulation over many years of a large stock of U.S.-owned foreign assets and the recent rapid increase in foreign-owned U.S. assets. Other private investment is the largest of the three types of international investment items, accounting in 1988 for about half of total investment receipts and about 57 percent of total investment payments (Table 6.1).

Direct Investment Receipts and Payments. The United States has consistently realized large net receipts from international direct investments. The surplus in this account category reflects the fact that U.S. direct investment abroad is larger and more mature than foreign direct investment in the United States. Net receipts increased rapidly during the 1970s, reaching $31.8 billion in 1979 as foreign affiliates of U.S.-based multinational corporations realized record profits (Figure 6.4). Over the next five years, however, these direct investment net earnings dropped to $12.0 billion in 1984,[2] reflecting both slowed economic growth abroad and the currency translation effects of the dollar appreciation. These net receipts recovered strongly in 1987, reaching a record $45.2 billion, largely reflecting significant currency translation gains. The direct investment income surplus declined in 1988 to $31.5 billion, largely as a result of the 59 percent increase in payments to foreign parents by their rapidly growing universe of U.S. affiliates.

Until 1987, payments to foreigners for direct investments in the United States had been relatively

Table 6.1

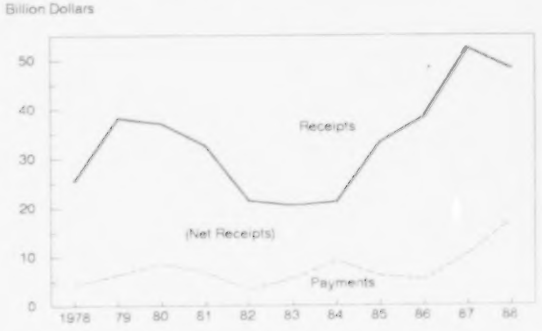
U.S. International Investment Income by Type, 1988 (Billions of dollars)

	Receipts	Payments	Net Receipts
Direct Investment	$48.3	$16.7	$31.5
Other Private Investments	52.8	59.7	-6.9
U.S. Government	6.7	29.1	-22.4
Total	$107.8	$105.5	$2.2

Source: Bureau of Economic Analysis.

Figure 6.4

U.S. Direct Investment Income Receipts & Payments, 1978-88



[2] Income earned by U.S. multinational corporations and other U.S. investors abroad is normally earned and initially reported in local currencies. Thus, changes in the dollar exchange rate have a direct effect on the reported income of the parent firms when converted from local currencies to dollars.

small. Large fluctuations in receipts from U.S. direct investment abroad were largely responsible for rather wide swings in net income in this account. Direct investment receipts grew steadily in the 1970s, peaking at an average of almost $38 billion in 1979 and 1980. After declining to an average of $21 billion during 1982-84, U.S. direct investment receipts increased rapidly over the next three years – the 1987 total of $54.8 billion representing a new record. These receipts fell to $48.3 billion in 1988.

Two factors apparently largely accounted for the income decline during 1981-84.[3] First, profits of U.S. affiliates abroad were adversely affected by the economic slowdown in most developed countries and several important LDC debtor nations. Second, appreciation of the dollar over the period negatively affected dollar earnings – that is, foreign currency earnings translated into smaller and smaller U.S. dollar values. The trend reversal since 1984 largely reflects a reversal of these factors.

Other Private Investment Income. The deterioration in the balance on other private investment income continued in 1988 with net payments reaching $6.9 billion, up from $4.2 billion in 1987 (Figure 6.5). The rapid growth in foreign private holdings in the United States since 1982 has been primarily responsible for the reversal to a net payments position from the record net receipts level of $24.6 billion six years earlier. This negative swing of over $30 billion was greater than the overall deterioration in the international investment income account.

U.S. receipts on other private investments increased more than fourfold between 1977 and their 1984 peak of $59.5 billion, reflecting increased foreign interest payments on both higher levels of U.S. bank lending abroad and increases in global interest rates. These receipts were substantially lower in 1985-87 as a result of lack of growth in the stock of bank lending and other U.S. private portfolio investment abroad and the general decline in interest rates. Receipts recovered to $52.8 billion in 1988.

In contrast, payments to foreigners on other private investments have grown rapidly in recent years, reflecting the continuing expansion of foreign-owned private assets in the United States and relatively high U.S. interest rates early in this decade. The general decline in U.S. interest rates through 1986 resulted in 1986 payments that barely exceeded the previous 1984 record level despite the continued growth in foreign ownership of U.S. private assets. During 1986-88, however, payments advanced over 50 percent, reaching a record $59.7 billion in 1988, as foreign-owned assets continued to increase and interest rates rebounded.

U.S. Government. Over the last several years, net U.S. Government payments to foreigners on U.S. Government securities have consistently increased more rapidly than receipts from U.S. Government-owned foreign assets, reaching a record $22.4 billion in 1988 (Figure 6.6). The slower growth in receipts reflects the more rapid increase in foreign holdings of U.S. Government securities than U.S. Government-owned foreign assets. Foreign holdings of U.S. Government securities at year-end 1988 had a book value of more than twice that of U.S. Government holdings of foreign assets.

Figure 6.5

U.S. Other Private Investment Receipts & Payments, 1978-88

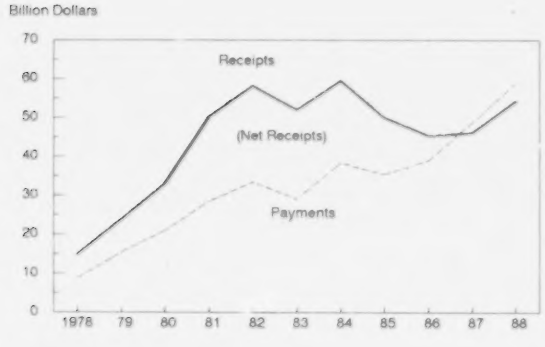
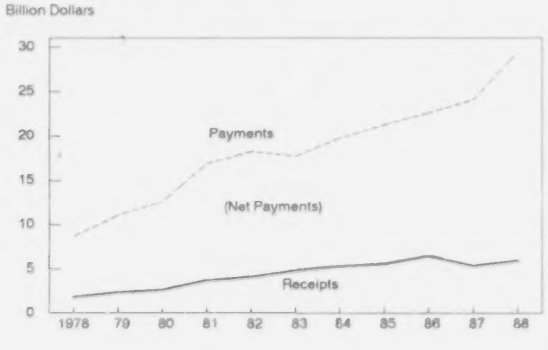


Figure 6.6

U.S. Government Income Payments & Receipts, 1978-88



In recent years the United States has encouraged foreign purchases of U.S. Government securities, including special arrangements with the major oil exporting countries during the 1970s and, more recently, by direct marketing abroad. Most U.S. Government holdings of assets abroad consist of relatively low-interest foreign assistance and trade credit loans. The low return on these assets contributes to the fact that U.S.

[3] Income receipts and payments include income reinvested by U.S. affiliates abroad and by foreign affiliates in the United States. Thus, total U.S. income receipts generally far exceed the income actually repatriated to the United States. Reinvested earnings have averaged about 40 percent of the total in recent years. These reinvested earnings are recorded as outflows in the capital account.

Government receipts typically total only about one-quarter or less of the value of U.S. Government payments.

Other International Transactions

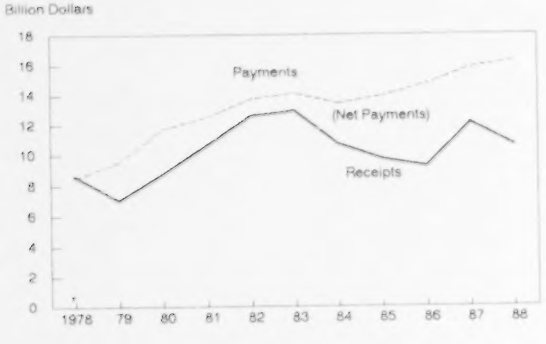
In this report, the current account category titled "other transactions" refers to military and U.S. Government services transactions. Since 1978 net payments in this category have averaged about $3 billion annually, but expanded to $5.6 billion in 1988 (Figure 6.7).

Military Transactions. Net military transactions are the receipts from U.S. exports under military sales contracts, less U.S. direct defense expenditures abroad. The United States has generally run deficits in the range of $2 to $4 billion in recent years, with the 1988 deficit reaching $4.6 billion.

U.S. Government Services. U.S. Government imports of services have consistently exceeded the very small total of U.S. Government services exports, which have never topped $1 billion. In recent years, deficits in this category have been small, averaging about $1 billion during 1981-88, and relatively stable.

Figure 6.7

U.S. Other Goods and Services Payments & Receipts, 1978-88



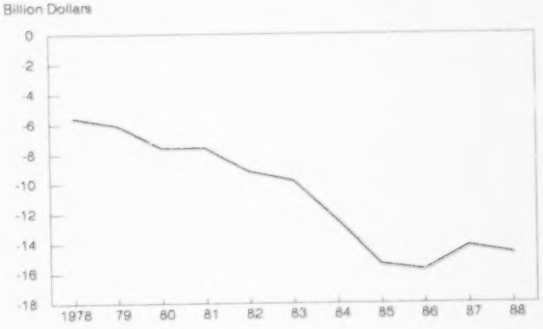
Net Unilateral Transfers

Unilateral transfers, as reported in U.S. international transactions data, consist of the flows resulting from government grants, pensions to U.S. citizens living abroad and other transfers, and private remittances and miscellaneous transfers. Reflecting the U.S. leadership role in international affairs, the transfers category is dominated by U.S. grant payments in the form of foreign grant aid and financing of military purchases.

Statistics covering unilateral transfers are reported only on a net payments basis because U.S. receipts are inconsequential. In recent years, U.S. net unilateral transfer payments have increased steadily from $5.0 billion in 1977 to $15.8 billion in 1986 (Figure 6.8). Net payments declined to $14.2 billion in 1987 and increased to $14.7 billion in 1988. U.S. Government grants accounted for about three-quarters of the total net unilateral payments, with the remainder divided between other U.S. Government and private sector transfers.

Figure 6.8

U.S. Net Unilateral Transfer Payments, 1978-88



Capital Flows and Deterioration of the U.S. IIP Position

As noted earlier, there are direct relationships between the U.S. current account, international capital flows, and the U.S. international investment position (IIP). Net capital flows are the mirror image of the current account balance. U.S. capital inflows accumulate in the form of an increasing stock of foreign-owned investments in the United States (U.S. liabilities). U.S. capital outflows accumulate as an increasing stock of U.S.-owned assets abroad. The net U.S. IIP is the stock balance of these U.S. and foreign-owned assets. In effect, current account balances and accompanying capital flows change a country's IIP – the balance sheet of its international assets and liabilities.

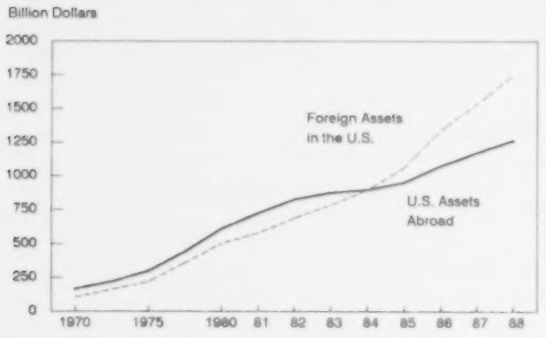
Current Account-IIP Linkage

As a result of continuing U.S. current account deficits and the accompanying net inflows of capital, the United States officially became a debtor nation in 1985 and the world's largest debtor nation by year-end 1986. During 1985 the value of foreign-owned assets in the United States officially exceeded the value of U.S.-owned assets abroad for the first time since 1914 (Figure 6.9).

Conceptually, U.S. current account balances are matched by equal and balancing capital flows – for example, a current account deficit is financed by increases in foreign-owned U.S. assets relative to U.S.-owned assets abroad that match exactly the amount

Figure 6.9

U.S.-Owned Assets Abroad & Foreign-Owned Assets in the U.S., 1970, 1975, & 1980-88



of the current account deficit. However, measurement discrepancies exist.

Current account data are measurements of international flows of goods and services and other receipts and payments. The data are collected from disparate sources, often using sampling techniques to develop estimates. Capital flow data are also collected from disparate sources and are similarly subject to statistical error. As a result of imprecisions in both data sets, indicated current account imbalances may not correspond exactly with indicated capital flows.

Indeed, the discrepancy between the two data sets is often sizable. In recent years, U.S. current account deficits frequently have been significantly greater than the reported net capital inflows. Some knowledgeable observers believe that there have been large, unrecorded capital inflows and that the net U.S. IIP may, in fact, have deteriorated more rapidly than the indicated amount. On the other hand, some believe that recent current account deficits have been overstated because of unrecorded exports of both merchandise and business services. Reported net capital inflows in 1988 were greater than the current account deficit.

Moreover, valuation methodologies employed in generating the U.S. IIP tend to enlarge the negative U.S. IIP. Officially published data on U.S. assets abroad and foreign assets in the United States probably understate their current market values. Assets which are recorded at or close to historical cost – primarily gold held as U.S. official reserves and direct investment position statistics – generally have a far larger current market value. U.S. official reserves of gold are valued at about $42 per ounce, resulting in an IIP value of about $11 billion, while the market value is many times greater. Direct investments are also recorded at their historical value. But over time, inflation and growth in earning power have increased the net worth of many of these investments above the historical value reflected in the IIP. This is especially true for the generally longer established stock of U.S. direct investment abroad.

Capital flow data provide the basic information used to determine the U.S. IIP. Various adjustments to the capital flow data are made before they are added to (or subtracted from) the previous year's IIP statistics. Some of the data on U.S. assets abroad – primarily U.S. official reserve assets and U.S.-owned foreign securities – are adjusted for exchange rate changes during the year. In addition, U.S.-owned foreign security values are adjusted for local currency price changes, and direct investment abroad data are subject to various adjustments. Adjustments to data on foreign assets in the United States include valuation adjustments for U.S. Government and private securities and various adjustments to data on foreign direct investment in the United States. However, the overall net effects of these adjustments have not been large. In recent years, adjustments to both U.S. capital outflows and U.S. capital inflows represented 2 percent of the total.

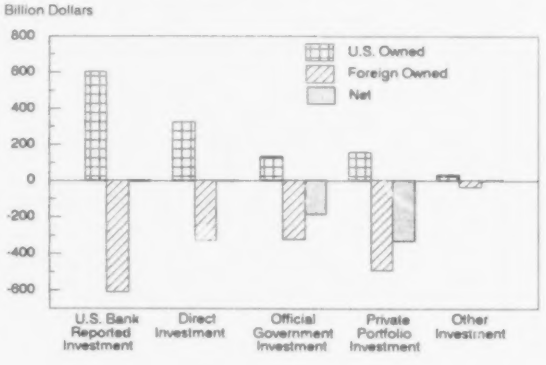
Rapid U.S. Swing into Debtor Status

For many years the United States registered a growing positive (creditor) international investment position – that is, the value of U.S. assets abroad consistently increased more than the value of foreign assets in the United States. The official U.S. creditor position peaked at $141 billion in 1981, but has since deteriorated rapidly as a result of large net U.S. capital inflows reflecting large U.S. current account deficits. The official IIP became negative in 1985, with the preliminary year-end 1988 debtor position reaching $532 billion. U.S. liabilities at year-end exceeded U.S. assets for all major types of investments (Figure 6.10).

Changes in the U.S. international investment position illustrate the rapid "internationalization" of capital flows and investment. The total value of U.S. assets abroad and foreign assets in this country more than doubled during both 1975-80 and 1980-86.

Figure 6.10

U.S. International Investment Position, by Type & Ownership, 1987



Recent deterioration in the net U.S. IIP reflects an acceleration in the growth of foreign-owned assets in the United States since 1982, while U.S. assets abroad have increased at a more modest pace. The resulting net capital inflows into the United States were stimulated by various U.S. and international macroeconomic developments.

U.S. Assets Abroad

U.S. holdings of assets abroad primarily consist of loans and other investments abroad by U.S. banks (almost one-half of the $1.25 trillion total for 1988), direct investment abroad (more than one-quarter of the total), and U.S. Government assets (including official reserves, and U.S. Government holdings of stock and bonds abroad). Total U.S. assets abroad grew rapidly between 1975 and 1982, increasing at an annual rate exceeding 16 percent. Between 1982 and 1985, however, the growth rate was less than 4 percent. The dramatic slowdown in the growth of U.S. assets abroad reflected generally more attractive investment opportunities in the United States than abroad and the financial effects of the LDC debt crisis. In 1986 the growth rate in U.S. assets abroad recovered to almost 13 percent, but in 1987 and 1988 growth slowed to an average of 8 percent.

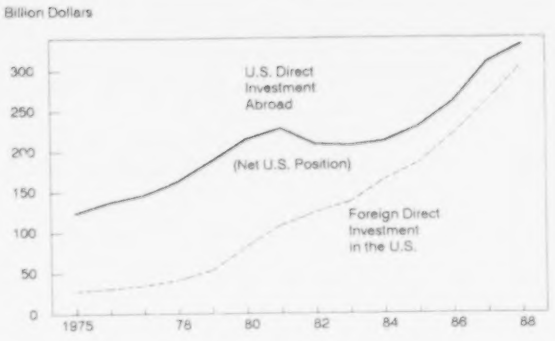
U.S. Bank Lending Abroad. Increases in foreign assets abroad held by U.S. banks accounted for almost two-thirds of the total increase in U.S. assets abroad between 1975 and 1982. A large portion of the increase in U.S. bank assets abroad during these years was loans to major developing countries, especially those in Latin America (for example, Mexico and Brazil). But debt in some LDCs had grown too rapidly. Economic policies in some LDCs discouraged domestic investment and growth of goods exports and instead encouraged capital flight to foreign havens, much of it to the United States.

The economic recession experienced by the United States and other developed countries in 1981-82 slowed the exports of major LDC debtor nations and left some of them without enough hard currency to meet their loan repayments. Thus, the recession served as the catalyst for the "LDC debt crisis." U.S. and other developed-country banks have made only modest additions to existing loans to LDC debtor countries since 1982, as those LDCs have been hard pressed to meet their existing repayment obligations.

U.S. Direct Investment Abroad. Since 1982, following strong growth during the 1970s, U.S. direct investment abroad (USDIA) slowed markedly. The year-end 1986 USIDA book value of about $260 billion was just 14 percent higher than the 1981 total (Figure 6.11). Strong USDIA growth resumed in 1987 at 19 percent, but slowed to 6 percent in 1988. The $327 billion total for 1988 represented 26 percent of total U.S. investment abroad.

During the early 1980s the adverse economic growth prospects for Western Europe and for Latin America—two areas with large amounts of USDIA—reduced the incentive for U.S.-based multinational corporations (MNCs) to make new investments or expand their existing investments abroad. Also, higher rates of return on portfolio investments in the United States than abroad encouraged U.S. parent firms to return available funds to the United States.

Figure 6.11
U.S. Net Direct Investment Position, 1975-88



Foreign Assets in the United States

During the last 10 years the value of foreign-owned assets in the United States increased fourfold to $1.8 trillion at year-end 1988 (compared with U.S.-owned foreign assets of about $1.3 trillion). This growth was relatively steady during 1980-84, with increases of about $100 billion annually. The increase in 1985 was over $165 billion, and in 1986 reached $279 billion. The increase in foreign-owned U.S. assets subsided to an average of $220 billion in 1987 and 1988.

Major types of foreign-owned assets include foreign private assets in U.S. banks (about one-third of the total), foreign private holdings of U.S. stocks and bonds (21 percent), foreign direct investment in the United States (18 percent), and foreign official holdings and private holdings of U.S. Government securities (18 percent and 5 percent, respectively). Most of these categories have rapidly increased, indicating that foreign investors are becoming increasingly integrated into most aspects of the U.S. economy and that the traditional U.S. policy of placing very few restrictions on foreign investment is encouraging a broad range of foreign investment activity in the United States.

Summary

This chapter illustrates the diversity and complexity of the various transactions that comprise the U.S. international accounts. It also shows the close interdependence between current account and capital account transactions. The dramatic shifts that have taken place in recent years in current account, capital flows,

and the U.S. international investment position are manifested primarily in the large prior deterioration and 1988 improvement in U.S. manufactured goods trade performance. Moreover, it appears inevitable that U.S. merchandise trade performance – particularly manufactured goods trade performance – will continue to be the dominant factor in U.S. current account developments.

The willingness of foreign businesses, institutions and persons to add to their stock of U.S. assets suggests that the United States remains a preferred international investment location. The strong growth in foreign invesment activity in this country has contributed to a stronger dollar than would otherwise have been the case and to sustained noninflationary growth. As the U.S. current account improves in the next few years, reduction of the U.S. external deficit will be manifested in a closing of the gap between foreign investment activity in the United States and U.S. investment activity in foreign countries.

7

IMPLICATIONS OF CURRENT U.S. TRADE BALANCE TRENDS

The United States' international trade performance and overall economic position in the international community is in the process of transformation. U.S. competitiveness showed strong signs of turning the corner in 1988, and this was reflected primarily in a surge in U.S. export growth to most foreign markets. The U.S. merchandise trade deficit decreased by one-fifth in 1988, with exports rising by 27 percent.

The United States remains the most powerful economic power in the world, but has reached a new level of economic interdependence with other nations with respect to merchandise trade, trade in business services, exchange of technology, intellectual property, capital markets, and foreign investment. We have become the largest member of a multinational capital market which operates virtually instantaneously via computers and satellite communication of transactions. As with our trading partners, international trade has become increasingly significant in the daily operation of our national economy.

The United States has entered a complex international economic environment. Major changes are taking place in the international economic power structure.The United.States and Canada are partners in the world's largest bilateral free-trade agreement – joining our economic ties in merchandise and business services trade and sharing our investment opportunities. Japan, now the world's second largest economy, is broadening its ties to industries throughout the Pacific rim. The European Community is moving toward the establishment of the world's largest single market by 1992. The four East Asian NICs are leading the rest of developing Asia toward near developed-country status and responsibilities. The principal individual centrally planned economies are moving toward market economy restructuring. And the debt-hobbled developing countries are pressing for relief of their debt burdens to get on with their own imperative economic progress.

Continued U.S. sharing in world economic growth and the potential economic benefits reflected in regional developments in Europe, Asia and the Americas depend on continued improvement in the fundamental macroeconomic factors that affect the U.S. current account and trade balances.

Fundamental Economic Factors

The United States and other nations face and must respond to major changes in fundamental macroeconomic factors. In 1988 the United States capitalized on an opportunity to enhance U.S. competitiveness and to reverse foreign price advantages created by the 1982-85 appreciation of the U.S. dollar. Potential gains in U.S. price competitiveness from the sharp dollar devaluation which occurrred between February 1985 and early 1988 began showing up in a surge in U.S. exports in late 1987 and into 1988. Improved U.S. price competitiveness enabled U.S. exports to take advantage of strong foreign economic growth. These gains occurred without large cuts in U.S. import growth – as U.S. economic growth and domestic consumption in 1988 also remained strong. As.a result, the U.S. share of world exports rose sharply in 1988 to 11.3 percent, and the U.S. share of world imports edged downward to 13.4 percent, both reversing prior trends.

Indeed, the vital importance of exports to the U.S. economy became strikingly clear in late 1987 and early 1988 as the economy became highly dependent on exports for economic growth. In 1988, merchandise exports were a direct source of 34 percent of U.S. GNP growth, while the income multiplier of earnings from these sales abroad increased exports' contribution to an even higher share. The rise in exports also contributed to U.S. employment growth, resulting in substantially reduced levels of U.S. unemployment. The U.S. economy in 1988 was truly export driven.

The contribution of exports to growth in individual U.S. industries' performance is reflected in their rise in output to high, and in several cases, near capacity levels, particularly the large export gainers such as aerospace and chemicals. The tightened capacity in these export

driven industries also underlines the vital need to increase U.S. saving and investment in U.S. manufacturing.

As pointed out in this report, the current account and trade balances reflect the excess of domestic consumption and investment over earnings from U.S. output sold domestically and exported – commonly referred to as the domestic saving gap. This gap between national purchases and earnings, of necessity, is filled by net inflows of borrowed (foreign) capital. The persistence of a large current account imbalance has resulted in a corresponding rise in the U.S. net negative international investment position reaching $532 billion at year-end 1988. The burden of the trade deficit on the current account has been enlarged by the shift in international income receipts produced by the net foreign capital inflow.

Importance of Foreign Growth

The decline in the U.S. share of world imports in 1988 reflected no dramatic drop in U.S. consumption in 1988 – consumption remained strong along with U.S. economic growth. The drop in the U.S. import share reflected, instead, the robust growth in domestic demand in foreign markets. Without strong growth abroad and open access to those markets for U.S. goods, the surge in U.S. exports and corresponding 1988 improvement in the U.S. trade balance would not have been possible.

The mirror image of the U.S. savings gap is the savings surplus run by major U.S. trading partners. In 1988, four countries – Japan, West Germany, Taiwan, and South Korea – accounted for 72 percent ($86 billion out of a total $120 billion) of the U.S. trade deficit. These four countries also provided the largest share of the U.S. net capital inflow, which in turn reflected their policies of restrained domestic consumption and investment and which generated their savings surplus. These countries relied heavily on export growth to provide their own domestic growth stimulus.

Manufactures' Key Importance

In U.S. goods and services trade, the largest single component accounting for the gap between U.S. domestic output and U.S. consumption and investment has been manufactures. Manufactured goods held a key place in the 1988 improvement of the trade balance – with manufactures exports jumping by 29 percent. Trade in manufactures is significant because its size, in terms of value and quantity, is much larger, relative to trade in other goods and services trade.

Improvement in manufactures has been hampered by the rising competition in high-technology product groups. The scope and intensity of foreign competitiveness in high-technology goods has been rising rapidly – in part, facilitated by technology's fungibility and ease of transmission, difficulties in protecting proprietary rights internationally, and the much higher civilian R&D expenditures of major competitor nations. Indeed, while the balances in most high-tech product groups improved in 1988, the balance in the key category of communications equipment and electronic components continued to worsen.

Trade in Services

The importance of business services in U.S. international trade is increasing. Indeed, the trade surpluses in these services rose from $12 to $19 billion. Even so, this component of the current account was too small to significantly improve the trade balance. Nevertheless, such services will continue to rise in importance as the world economy becomes increasingly interdependent.

Trading Partners

Demonstration that the key factors aiding U.S. trade performance in 1988 were macroeconomic, rather than mainly market specific, is demonstrated by the widespread improvement of U.S. trade balances with most of its trading partners. Indeed, export growth was very high with the very same markets with whom the U.S. deficits were largest – rising by 34 percent to Japan and 48 percent to the East Asian NICs. Clearly, the dominant factors were U.S. export price competitiveness enabled by the post-1985 dollar depreciation and, to a lesser extent, the strong foreign economic growth in 1988.

Serious problems remain, however, in the access of U.S. exports to some major markets. This is true not only for agricultural products but also for exports in high-technology groups. In the latter case, the tendency in key countries has been too often to restrict access to their markets in anticipation of subsidizing growth of high-tech product capabilities until export competitive scale is achieved. Despite the overall U.S. export growth to Japan and the East Asian NICs in 1988, the U.S. balances in high-tech products to these markets continued to worsen.

Foreign Capital Inflows

Foreign investment in the United States and capital inflows continue to rise. The U.S. net negative international investment position continued to rise not only as a result of the 1988 trade deficit, but also because of the decline in the U.S. net international investment income balance. Even though the level of the trade deficit shrunk, the continued growth in the net negative international investment position mandated a continued rise in international income payments to foreigners.

While the United States substantially reduced the annual demand for net foreign capital inflow in 1988, demand for foreign capital remains large due to a continued current account imbalance. Moreover, as the net international investment position continues to rise, even though the deficit declines, so does the burden of rising income payments on imported capital. In 1988, the

U.S. net international payments receipts virtually disappeared, and for two quarters of the year shifted to net payments.

Much of the U.S. net international investment inflow has been in the form of increased foreign ownership of U.S. manufacturing capacity. Foreign inflows also tend to bring with them the opportunity for inflows of new technology and in some sectors improvements in productivity – both enhancing overall U.S. competitiveness.

Outlook – Future Adjustments

The balancing of the U.S. trade and current accounts is becoming increasingly more complicated by the continuing growth of the net international investment imbalance and attendant net international investment income payments. Eventually the trade balance must be brought into surplus not only to prevent further rise in the U.S. international debt position, but also to pay the net international income outflow as long as that net position persists.

The effort to correct the U.S. trade imbalance will necessarily require adjustments in the U.S. economy. At the macro level, it implies an increase in savings relative to output earnings. At the micro level, it implies greater investment in capacity to produce the required output for the domestic market and exports as well as investment in productivity and quality to enhance competitiveness and improve market shares. Moreover, resistance to interest rate increases also will be needed to prevent upward pressure on the dollar's exchange rate and loss of price competitiveness.

Improvement in the U.S. merchandise balance must come primarily in manufactures trade. The large manufactures trade surpluses of some U.S. trading partners will inevitably need to shrink. They will no longer be able to rely on the U.S. market as a source of their export growth, but will need to seek the sources of domestic growth from within their own economies.

Continued U.S. export growth will depend on improving access to foreign markets multilaterally through successful conclusion of the Uruguay Round of the GATT as well as supplemental bilateral market opening efforts. A close watch will be required on the effect of the 1992 European Community's single unified market developments. The growing trade ties of Japan with the Pacific rim countries must also be watched. The gains from opening the border with Canada also must be nurtured. Moreover, a basis for increasing importing ability of the LDC debtors must be found.

Finally, U.S. exporters, and the U.S. economy in general, will need to resist pressures to renew price increases else the gains in 1988 will be quickly eroded. U.S. producers need to continue taking advantage of renewed price competitiveness produced by post-1985 dollar depreciation. Equally important, they must be encouraged to increase investment in capacity and technology to enhance their competitiveness.

Failure to overcome market barriers and to enhance competitiveness in productivity and technology will be the cause of tomorrow's trade deficits.

APPENDIX A
SPECIAL TOPICS

U.S.-CANADA FREE TRADE AGREEMENT

by Ann H. Hughes
Deputy Assistant Secretary
for Western Hemisphere

This Free Trade Agreement will promote economic growth, expand exports, and create jobs in the United States and Canada. On both sides of the border business and consumers will benefit.

Introduction

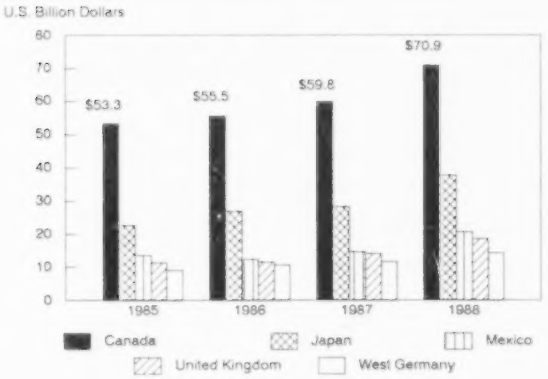
The U.S.-Canada Free Trade Agreement (FTA) – signed by President Reagan and Prime Minister Mulroney on January 2, 1988 – culminated more than two years of negotiations. The FTA came into force on January 1, 1989, and provides for comprehensive liberalization of U.S.-Canadian trade by eliminating all tariffs, most nontariff barriers and easing restrictions on investment.

Both the United States and Canada will realize benefits in the form of greater economic growth, more jobs, lower prices, and increased competitiveness vis-a-vis third countries. Major FTA provisions address tariffs, customs rules of origin, government procurement, services, investment, border crossing procedures, energy trade and dispute settlement.

The United States and Canada share the world's largest trading relationship between two countries, which amounted to $154 billion in 1988, a $21 billion increase over 1987. Bilateral business services trade totaled $15 billion in 1988. Each country is the other's largest and most important trading partner. In 1988 Canada sold 73 percent of its exports to the United States, and 66 percent of Canada's imports originated in the United States.

In 1988, 22 percent of U.S. exports, or nearly $71 billion worth, were sold to Canada (Figure A.1). U.S. exports to Canada were almost twice as large as those to any other single country, and almost as large as exports to the entire European Community, which has a population of 320 million versus Canada's 26 million.

Figure A.1
Canada Is Largest U.S. Export Market, 1980 & 1988



U.S.-Canadian trade has experienced rapid growth in recent years. Between 1980 and 1988, U.S. exports to Canada increased by 77 percent, compared with an average 36 percent increase to the rest of the world. Thus, U.S. trade performance in future years depends to a great extent on continued and enhanced access to the Canadian market.

The FTA will increase predictability in the bilateral commercial environment by limiting governmental restrictions on trade and investment. In addition, it will serve as a model for the Uruguay Round negotiations of the General Agreement on Tariff and Trade (GATT), especially in the "new" GATT issue areas, such as services and investment.

Tariffs

The centerpiece of the Free Trade Agreement is eventual elimination of tariffs on all U.S. and Canadian goods. Although 73 percent of U.S. exports entered Canada duty free before the FTA, the tariffs on the other 27 percent constitute a significant barrier to U.S. exports. Based on 1987 trade, Canadian tariffs on U.S. goods averaged 9.9 percent prior to the FTA, and U.S. tariffs on Canadian goods averaged 3.3 percent.

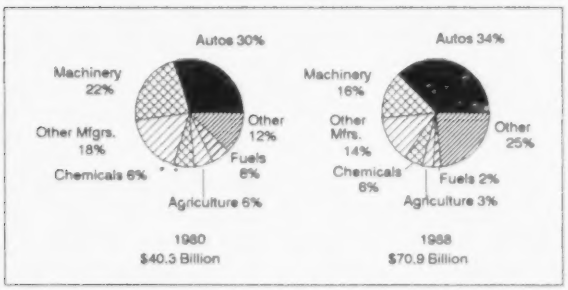
Elimination of Canadian duties means that many U.S. goods will be more price competitive in the Canadian market. U.S. manufacturers also may be able to reduce production costs by increasing their use of Canadian inputs. These cost reductions also will help make U.S. goods more competitive in third-country markets. Canadian firms will also enjoy similar increased competitiveness in the U.S. market and a wider variety of supply options. Consumers in both countries will benefit because of cheaper products and a wider choice of goods.

Dutiable goods were placed on one of three lists to become duty free on January 1 of either 1989, 1993, or 1998. Those industries considered most sensitive to imports were placed on the 10-year phase-out schedule in order to facilitate adjustment to the free trade environment.

Many U.S. industries will benefit from the elimination of significant tariff barriers. Among the best prospects for export to Canada are computers and peripheral equipment, auto parts and accessories, telecommunications equipment, building materials and supplies, furniture, and trucks, trailers and buses (Figure A.2).

Figure A.2

U.S. Exports to Canada, 1980 & 1988



Trade in automotive goods comprises a special category because of the Automotive Products Trade Agreement of 1965. Under the terms of the Auto Pact, as this agreement is popularly known, over 95 percent of U.S.-Canadian automotive trade is duty free. However, elimination of the remaining duties on some original automotive equipment and all aftermarket parts will significantly increase opportunities to expand U.S. exports.

The FTA makes other important changes, including limitation of firms receiving Auto Pact benefits in Canada to current members and elimination of the Canadian auto duty remission programs, which can distort the production, investment and sourcing decisions of manufacturers. Also, the Canadian prohibition against the importation of used automobiles is currently being phased out.

Many U.S. and Canadian firms will be able to take advantage of increased economies of scale as a result of the FTA. Companies will no longer have to maintain separate, and in many cases redundant, manufacturing facilities in both Canada and the United States, in order to avoid high tariffs. Now firms can organize their production in the way that is most efficient and that allows them best to serve their North American and foreign markets.

Finally, the FTA provides for accelerating tariff reductions, if both sides agree. U.S. companies wishing to pursue accelerated tariff reductions must petition the government, through the Office of the U.S. Trade Representative. Negotiations to accelerate tariff reductions will be held annually until 1996.

Rules of Origin

The FTA provides for elimination of U.S. and Canadian bilateral tariffs, but allows maintaining tariffs on goods entering from third countries. The FTA includes new rules of origin in order to prevent third countries from gaining duty-free access to either Canada or the United States by transshipping goods and to promote the use of North American content in goods. The new rules of origin ensure that FTA benefits accrue only to U.S. and Canadian goods. Components imported from third countries must be transformed in ways that are commercially and physically significant in order to be treated as a product of Canada or the United States for the purpose of the agreement.

Government Procurement

The United States and Canada are both signatories to the GATT Government Procurement Code, which requires that purchases by specified government agencies valued at more than $171,000 be open to free competition. The FTA incorporates the GATT obligations and extends the value range in which competition will be open to North American suppliers. U.S. and Canadian companies may now compete for certain federal government contracts over $25,000 in value. This value extension opens many new opportunities for U.S. businesses, especially small and middle-sized firms which have had difficulty bidding for larger tenders. Canadian Government purchases covered by the FTA amount to an estimated $1.0 billion annually.

Business Services

The FTA establishes new principles governing future trade in business services that acknowledge the growing importance to both countries of the services sectors. There are no international rules covering services trade, although achieving them is a prominent item on the GATT Uruguay Round agenda. The FTA services chapter sets a precedent for multilateral efforts to negotiate rules for services trade.

Two-way trade in business services amounted to $15 billion in 1988, a significant increase from the 1987 level

of $13 billion. While services markets in both countries are relatively open, the FTA ensures that no new restrictive measures will be adopted. In telecommunications, it provides for secure access to and use of the basic telecommunications network and provides rules on trade in enhanced telecommunications services. In architecture, it provides for reciprocal acceptance of professional credentials. The parties agreed to continue discussions to eliminate existing discriminatory barriers to bilateral services trade.

Several principles form the basis of the services agreement. First is national treatment, the guarantee that the other party's firms will be treated no less favorably than domestic firms. Another principle guarantees the right to choose the form of market access in services – the right either to sell across the border or to establish a commercial operation. Neither country may bar the other's service providers from entering the market to sell their services. Neither country may force companies to establish a domestic presence as a condition of access. Finally, the countries agreed to make their regulations governing services sectors transparent, or publicly available. The affected firms and individuals will have the opportunity to review and comment on proposed regulations and understand the "rules of the road."

Investment

The FTA investment agreement creates a more open and secure environment for investment. Bilateral direct investment amounted to $79 billion in 1987. Significant liberalization in investment was undertaken in 1985 by the Canadian Government when it replaced the Foreign Investment Review Agency (FIRA) with the new agency Investment Canada, whose mandate is more favorable to foreign investment than was FIRA's mandate. However, potential investors remained subject to pressure to comply with certain performance requirements, usually related to trade. The FTA eliminated these performance requirements, which often distorted trade and investment patterns.

The circumstances in which Investment Canada will review potential acquisitions by U.S. firms have been narrowed considerably. After an initial phase-out period, government screening will only take place if a direct acquisition involves more than $150 million in constant 1992 Canadian dollars. Indirect investment will no longer be screened after the phase-out period.

Some important exceptions to these rules exist in sensitive areas, such as cultural industries, financial services (covered in a separate FTA chapter), communications, and energy. Both countries have agreed, however, not to make any of these "grandfathered" regulations more restrictive.

Border Crossing Procedures

The FTA has simplified border crossing procedures for four classes of visitors to Canada: business visitors, traders and investors, intracompany transferees and professional service providers.

Business visitors are defined as those entering Canada temporarily to engage in normal business activities, such as sales or after-sales service under warranty resulting from an original sale. They must be paid by a U.S. company in the United States. **Traders and investors** are those entering Canada temporarily to pursue opportunities to trade in goods and services or to invest. **Intracompany transferees** may work temporarily in Canada if the position requires specialized expertise or managerial skill. **Professionals,** including scientists, accountants, lawyers, teachers and management consultants, among others, may enter Canada without labor certification if they can verify their professional credentials and document the arrangements for the work to be done in Canada. Specific inquiries should be directed to Canadian consulates throughout the United States.

Energy

The FTA provisions covering energy further liberalize the world's largest bilateral trade in energy products – over $10 billion per year. The United States is the world's largest consumer of energy, and Canada is the largest single U.S. supplier. The FTA Energy chapter covers petroleum, natural gas, coal, electricity, uranium, and other fuels.

Under the FTA all remaining tariffs on energy products are eliminated. Both countries agreed to maintain free trade in energy. Neither country will introduce new restrictions regarding energy imports or exports that would place the other at a disadvantage. These provisions will assure that energy-producing and energy-consuming industries can make decisions on future energy supply relationships based on market considerations. The increased measure of predictability that the FTA affords will ensure that long-term investments in the energy sector will be evaluated on their economic merits, with greater confidence that government regulations will not change the rules.

Dispute Settlement

The Canada-United States Trade Commission was established by the FTA to supervise the implementation of the agreement and to resolve disputes on all matters except financial services and antidumping and countervailing duties. The commission is composed of cabinet-level representatives of both governments and operates by consensus.

Either government may request consultations. Both governments will attempt to avoid or resolve disputes through consultations. If consultations are unsuccessful, either government may request a meeting of the commission. The commission may use a mediator or draw on expert advice in seeking a bilateral settlement. If the dispute is not resolved in this manner, the commission

may agree to refer the matter to binding arbitration, or a panel of experts can be convened at the request of either party.

The United States and Canada will continue to apply their own national antidumping (AD) and countervailing (CVD) duty laws to goods imported from the other country. In such cases, independent binational panels acting in place of national courts will expeditiously review final AD and CVD determinations to decide whether they are consistent with the AD or CVD law of the country that made the determination.

The panel procedure – combining independent review and judicial standards with an FTA-created forum and a tight schedule – will allow quick resolution of AD/CVD issues between the two countries without unnecessary bilateral trade friction, yet preserve the rights of injured companies to obtain relief from unfair trade practices. The panel mechanism will remain in place for up to seven years, while a bilateral working group attempts to develop new approaches to unfair pricing and government subsidies that would ensure effective discipline over unfair trade practices and minimize unfair trade disputes within the new free trade area.

Implications for U.S. Industry of the European Community's 1992 Program

By Debra L. Miller
International Economist
Office of Industrial Trade

EC 1992 has been called the most profound transformation of Europe since Charlemagne. The impact of these changes will be vitally important to U.S. trade with, and investment in Europe.

Introduction

By 1992 the European Community (EC) expects to have removed barriers to the free movement of goods, people, capital and services, resulting in a single $4 trillion market of 320 million consumers. American companies are both excited and concerned about this prospect. The 12-nation European Community is currently the most important foreign market and business partner for the United States. In 1988, U.S. merchandise exports to the Community were $75 billion, and sales of U.S. subsidiaries in the EC were over $550 billion.

The 1957 Treaty of Rome committed EC member states to eliminate tariffs among themselves as well as to erect a common external tariff, forming a common market. A customs union was completed ahead of schedule in 1968, but thereafter the EC's integration program languished. Numerous fiscal, physical, and technical barriers to trade within the EC remained. In 1985 interest renewed in completing the project laid out some 30 years earlier, and the EC Commission laid out a plan for the removal of remaining intra-EC trade barriers. That plan became known as the "1992 program" because its target date for implementation is December 31, 1992. The EC's 1992 program attempts to eliminate remaining barriers to intra-EC trade by ratifying and implementing a legislative package of 279 directives and regulations. By May 1989 the European Commission had introduced fully 90 percent of those directives affecting industry, and close to 50 percent of the directives have been ratified by the European Council of Ministers.

The U.S. Department of Commerce (DOC) has undertaken an extensive program with U.S. industry to review the EC's directives and policy initiatives. The DOC has been working with over 100 trade associations and has been contacted by some 10,000 firms on 1992 issues. In addition, the department is working with other U.S. Government agencies to formulate policy and build a coordinated approach to consulting with the EC on how to solve any problems for U.S. business that result from the 1992 program.

The U.S. Government's initial assessment of the EC's program is positive. Closed markets, such as for insurance and government procurement, should become more open, and costly and burdensome technical barriers to trade should be eliminated. The EC rule will be that if a product can be sold in one country it can be sold in all. A new common customs document has already been introduced, eliminating the need for scores of different customs forms and allowing U.S. exporters easier access to Europe.

U.S. firms should prepare themselves, however, for increased competition in the EC market. A wave of mergers, acquisitions, and strategic alliances is sweeping across Europe. EC firms that have previously focussed only on doing business in their own countries are expanding their horizons to encompass all of the Community. Companies are studying the changes in EC policies to ensure that their products and procedures will conform to the new regulations. The single unified market will permit firms to enjoy greater economies of scale and lower costs, and ultimately create stronger European competitors.

To aid U.S. businesses preparing to take advantage of new commercial opportunities in Europe, the U.S. Government been concerned with ensuring that U.S. companies receive the same opportunities and treatment as European firms in 1992. The following discussion assesses the resulting opportunities and possible problems of four critical elements of the EC's program: its "New Approach" to industrial standards, liberalization of the services sectors, opening of EC government procurement in excluded sectors, and the EC's use of local content regulations and rules of origin in sensitive sectors.

The EC's 1992 program should benefit U.S. companies doing business in Europe. However, market access issues do remain and are discussed below.

EC's "New Approach" to Standards

The EC once estimated that over 100,000 European and individual EC member states' industrial standards and technical regulations were in force in the Community. Many regulations act as nontariff barriers to the free circulation of goods within the EC. For example, pasta purity regulations in Italy effectively kept out pasta not entirely made of hard wheat. In addition, differing industrial standards on capital goods could force exporters to produce to the demands of 12 different sets of regulations rather than the demands of the market.

Past EC attempts to deal with technical barriers to trade through harmonization have been largely unsuccessful. In contrast, the EC's "New Approach" to standards allows products that have been granted market access in one European member state to freely circulate in all other EC countries, provided that they do not impair the health and safety of consumers. That is good news for U.S. exporters. Manufacturers that previously have had to produce to 12 different sets of industrial standards or regulations may now be able to produce to one set of standards.

EC directives that eliminate technical barriers to trade stipulate for certain products the essential requirements to which manufacturers must conform in order to gain access to the EC market. These legally binding requirements will be supplemented by regional voluntary standards created by European standards-setting bodies. These bodies are ultimately to develop standards to replace thousands of differing national standards. Where national standards remain, a system of mutual recognition of EC member state standards is to exist. The EC also is to establish a system of testing and certification to ensure conformance with essential requirements and to provide incentives for adhering to voluntary standards.

The "New Approach" offers economies of scale and ease of administrative burdens. Nonetheless, from a U.S. perspective, there are some concerns about both the process and the outcome. First, U.S. industry has complained that there is a lack of transparency in the standards-development process in Europe. U.S. exporters do not have formal channels for direct influence in the crucial pre-proposal stage. As a result, U.S. manufacturers already have had to deal with very short lead times to change the design of their products and testing procedures. The U.S. Government has already begun consultations with the EC on the lack of transparency. One result is that the European regional standards development bodies have begun to provide U.S. standards bodies information about their standards development agendas.

Second, a few EC technical regulations and standards are different from and even incompatible with U.S. standards or testing requirements for the same product, such as telecommunications equipment, bottle sizes for wine coolers, and certain auto emissions tests. Production to two different standards or test procedures imposes additional costs on the manufacturer, which could reduce the competitiveness of U.S. products in Europe. The U.S. Government is raising individual problems such as these with the EC Commission as they arise.

Third, certain interpretations of new standards could undercut the competitive edge of innovative U.S. products if such products are ruled to be "non-standard" and denied access to the EC market. This is a frequently expressed U.S. concern for telecommunications equipment.

Finally, U.S. industry has expressed concerns about the EC's new testing and certification system. A July 27, 1989 commission policy proposal indicates that when third-party testing is required the EC will only accept test results from EC recognized testing facilities. It is important that the EC accept test data generated by U.S. laboratories.

The EC's new technical regulations should lower costs and generate opportunities for U.S. producers. But many individual standards are still being developed as part of the 1992 program, and the processes of standardization and implementation will require very careful monitoring by both the U.S. Government and the business community to ensure U.S. firms fair EC market access.

Liberalization in the Services Sector

A key element of the EC's program is creation of an single EC internal market in the services sectors, including financial services, insurance, broadcasting, and air and road transport. U.S. service providers welcome this development. A single EC market will allow the provision of intra-EC cross-border services with greater ease and efficiency.

The critical issue for U.S. companies is the extent to which they will be able to partake of the benefits of liberalization in these sectors. The key financial services directives, including the Second Banking Directive and the proposed insurance and securities directives, contain a reciprocity provision. Under these insurance and securities directives, institutions of non-EC parentage will be permitted access to the European market on the same basis as EC firms if their home country grants reciprocal treatment to all EC financial institutions.

The United States has opposed this provision and argued for a national treatment standard. Reciprocity has been a principal focus of U.S. Government discussions with the EC. The U.S. Government will continue to oppose measures that would result in discrimination or protection.

U.S. firms also generally welcome EC liberalization of the transport and broadcasting sectors. The proposed directives for these two sectors contain no reciprocity provisions, but they do discriminate against non-EC firms. For example, under the EC's liberalized civil

aviation regime, only EC airlines will be permitted to act as price leaders. U.S. carriers will not be permitted to initiate lower fares. The United States has no such equivalent rules. In broadcasting, over 50 percent of television programming (excluding news, sportscasts, games, advertising, and teletext) must originate in the Community, "wherever practicable." The United States does not set quotas on foreign television programming.

In summary, the extent to which U.S. service providers will benefit from EC services sector liberalization is unclear. Judgement must be withheld until the EC makes a ruling on the definition of reciprocity and until the practical effects of the EC's new rulings on other services can be measured.

Government Procurement

Purchasing by the EC public sector – about $600 billion annually – accounts for about 15 percent of the EC gross domestic product. Yet, only 20 percent of this amount has been subject to open tendering and only 2 percent awarded to non-EC firms. The goal of the EC 1992 program is to open EC national public procurement to EC-wide bidding.

The EC has already taken steps to liberalize public procurement. The EC Council has approved increased bidding transparency and prohibited single-bid and no-bid contracts without adequate public notice. In addition, the Council has agreed in principle with the EC Commission's proposal for an appeal procedure for companies and suppliers who believe a contract has been awarded unfairly.

The EC Commission also has proposed directives which would extend open public procurement rules to sectors previously excluded from competitive procedures and from the GATT Government Procurement Code: telecommunications, water, energy and transport. Only products and services that contain at least 50 percent EC content must be considered. Suppliers of products meeting the local EC content rule must be favored over suppliers of other products when there is a 3 percent or less cost differential between bids.

U.S. business has generally viewed these developments as positive. Many U.S. firms are based in the EC and produce products that can meet local content tests. In addition to public entities, the rules will also pertain to private quasi-public entities over which governments continue to have substantial influence, such as telecommunications and power generating businesses. While the government procurement proposals do not offer new rights of bidding to products that are not of EC origin, no purchaser is compelled to set aside U.S. bids, whatever their EC content level.

Nonetheless, two issues associated with these directives are of concern to the United States. First, the EC Commission has stated that in order to be eligible for the benefits of procurement liberalization, third countries should negotiate agreements with the EC guaranteeing equal access to their own similar markets. It is unclear how this reciprocity principle will apply to the United States and whether continued access is in doubt for U.S. firms already established in the EC.

Second, the Commission has stated that a transitional period should be given to EC producers to allow the "necessary time for industrial adaptation" before extending reciprocal access to third country firms. The U.S. Government already has indicated that this sort of infant industry approach is unacceptable.

Thus, the general direction of EC procurement liberalization is positive, but the extent of improved access for U.S. goods and services is not yet certain. The U.S. National Association of Manufacturers has pointed out that in light of this situation major multinational alliances between EC and U.S.-based firms have already begun to be initiated to provide the latter with assured continued access to potentially more open EC government procurement.

Local Content Rules and Rules of Origin

Although not explicitly in the 1992 program directives outside the government procurement subject, EC officials have discussed in general terms the application of local content rules and rules of origin in certain sensitive product sectors in the coming years. Local content rules compel firms to source specified percentages of products within the EC. Rules of origin define a standard for determining the origin of a product, and can become a contoversial trade policy tool in the case of products produced in two or more countries. During the past six months, both the member states and the EC Commission have either enacted or proposed new rules of this type for certain products. Use of such rules is generally discouraged by the GATT (General Agreement on Tariffs and Trade), because these rules can distort comparative advantage, artificially reduce trade, and cause the consumer to pay a higher price for a lower quality product.

The two most discussed recent cases on this subject concern semiconductors and automobiles. In January 1989, the Commission ruled that in order to be considered European in origin, and thus avoid the EC's external tariff of 9 to 14 percent (plus, in some cases, dumping duties), semiconductors must be "diffused" in the EC. This ruling will principally affect several U.S.-based and Japanese-based companies that only perform assembly and testing in the EC.

Several EC member states are currently suggesting local content rules for automobiles. One member-state proposal is that a car must be comprised of 80 percent EC-sourced parts in order to be considered European. Under this standard, for example, Nissan automobiles made in the United Kingdom would not be considered EC products, and thus would be counted against the quota which certain EC member states maintain against Japanese cars.

In the case of rules of origin, U.S. companies have lost markets, and U.S. investment flows are being affected. In the case of local content, EC subsidiaries of U.S. automobile manufacturers generally source parts in the EC. U.S. cars, in any event, are not subject to quotas.

There may be some undesirable secondary effects on U.S. exports under certain conditions. U.S. production that incorporates foreign (non-EC) components may be considered of non-U.S. origin and thus may be subject to certain dumping duties or quotas when entering the EC. To the extent that foreign firms substitute EC-sourced parts for U.S.-sourced parts to meet the new local content or origin rule requirements, the U.S. trade balance and U.S. parts producing industries would be adversely affected.

Conclusions

The EC is expected in 1989 to make major proposals in the areas of mergers and acquisitions and social policy. These issues, like those mentioned above, must be closely monitored to ensure fair access for U.S. products and services.

Despite the potential problems noted above, the Department of Commerce believes that the 1992 program offers significant commercial opportunities which U.S. business should assess. The EC has already begun to implement its program. Knowledgeable companies are developing 1992 strategies now.

Contribution of Exports to U.S. Employment

By Lester A. Davis
International Economist
Office of Trade and Investment Analysis

Exports supported a growing number of U.S. jobs in 1987, and contributed a greater than proportionate share of U.S. employment growth.

The following is a summary of a March 1989 report, *Contribution of Exports to U.S. Employment, 1980-87*, that was issued by the International Trade Administration's Office of Trade and Investment Analysis. This report is an update of a report issued in 1986.

The March 1989 report provides detailed results for total U.S. export-related employment, and for manufacturing, agriculture, other goods sectors, and the services sector. The report identifies the contribution of exports to total U.S. economic and employment growth. It also provides data on export-related jobs in high-tech versus non-high tech manufacturing, jobs related to exports to Canada, Mexico, Japan and the European Community, and the impact on export-related jobs of changes in export volume, productivity growth and increased use of imported inputs to goods production and services.

Exports Are Large Job Generator

U.S. exports of domestically produced merchandise have traditionally been an important source of employment in the United States. In 1987 the total number of U.S. jobs generated by exports reached nearly 5.6 million. This means that, on average, each billion dollars of merchandise exports supported 22,800 jobs.

Preliminary data, based on 1987 results and other sources, indicate that the total number of jobs in 1988 may have jumped to as high as 6.5 million, and the average may have decreased to 21,900 jobs per billion dollars of exports.

In 1987, exports accounted for one out of every 16 jobs in the United States when counting jobs on a full-time equivalent basis. The total number of jobs generated by exports includes more than just jobs in the factories, on farms, and in other activities that produce the final goods that are exported. The job-generating ripple effect of exports on jobs in other activities is far wider. They include jobs both directly and indirectly supported by exports. As can be seen in Figure A.3, two-thirds of total export-related jobs – 3.7 million jobs – are indirectly generated. As a result, for each job directly generated by exports, roughly two more are indirectly supported.

Figure A.3

Sources of Export-Generated Jobs in 1987

The 1987 surge in merchandise exports produced a substantial rise in the total jobs generated by exports. Total export-related jobs rose by 8 percent in 1987, and were 10 percent over their 1985 low-point of 5.1 million jobs (Figure A.4). The surge in export volume continued strongly in 1988 and probably brought the total export-related jobs up close to their 1980 prior peak.

Industries leading in export-related jobs in 1987 were those producing electronic components and computing

equipment. Close behind were grains and soybeans. See Table A.1 for the 10 top export-related jobs industries.

Export Impact on Economic and Employment Growth

The resurgence in export volume since 1983 has been making an important contribution to the growth in the U.S. economy and civilian employment. U.S. export volume rose marginally faster than other U.S. GNP components between 1983 and 1986, and then in 1987 rose five times faster than the rest of the economy. As a result, beginning in 1984, exports started making a contribution to the growth of GNP proportionately greater than exports' share of GNP.

In 1987 exports' share of GNP growth was far greater than proportionate. In 1987 exports were only 7.4 percent of GNP, but accounted for a four-times larger share – 29.3 percent--of GNP growth, not including any income multiplier effects. Preliminary data show that the export surge contributed an even larger share--about 34 percent – of GNP growth in 1988.

Figure A.4

Export-Generated Jobs and Their Share of Total Civilian Employment, 1980-87

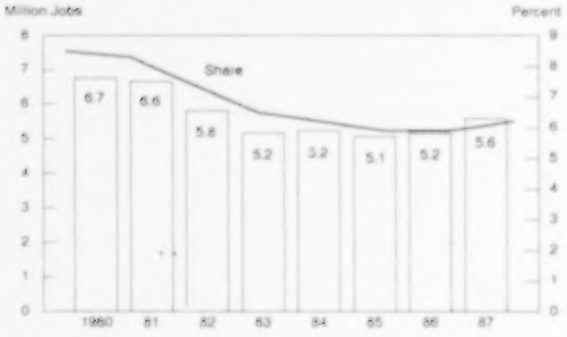


Table A.1

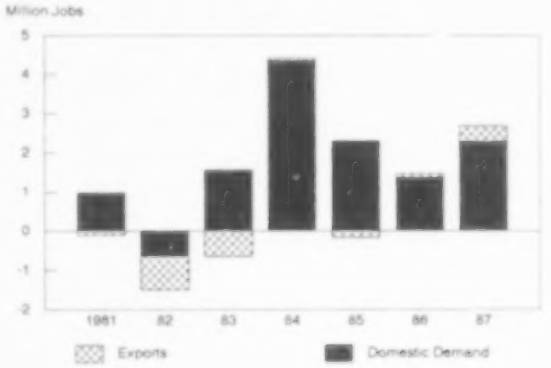
Top Ten Export-Related Employing Goods-Producing Industries in 1987

Industry	Total Direct & Indirect Export-Related Jobs 1,000 Jobs 1980	1987	1980-87 Change (Percent)
Electronic components	162	185	+14.2
Electronic computing equipment	147	183	+24.5
Grains (ex. soybeans) & products	274	174	-36.5
Oil bearing crops (incl. soybeans)	191	129	-32.5
Industrial chemicals	126	106	-15.0
Nonferrous primary metals	166	90	-45.8
Forestry products	114	89	-21.9
Aircraft & missile parts (ex. engines)	72	86	+19.4
Aircraft	113	80	-29.2
Livestock, poultry & products	74	83	+122.2

In 1986 export growth was sufficiently high to start making a significant positive contribution to U.S. employment growth (Figure A.5). The 1987 export surge sharply increased the gain in export-related jobs and pushed the growth rate of export-related jobs higher than the growth rate for domestic-consumption related jobs. In 1987, export volume rose so strongly that it made a much higher than proportionate contribution to U.S. employment growth. In 1987 export-related jobs accounted for only 6.2 percent of total U.S. civilian jobs, but accounted for more than twice as large a share – 15.3 percent--of total civilian employment growth.

Figure A.5

Growth in U.S. Civilian Employment Contributed by Output for Exports and Domestic Employment, 1980-87



Factors Accounting for Job Trend

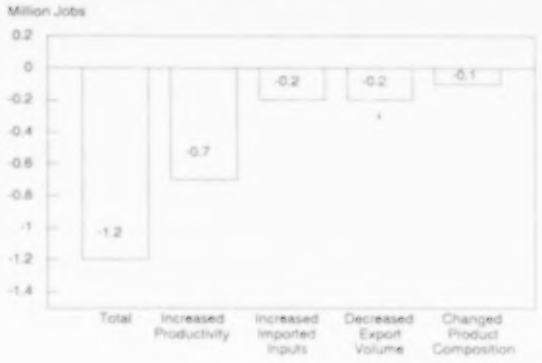
The main driving force in the growth of export-related employment is growth in export volume. However, three other factors also directly account for changes in the number of jobs supported by exports.

- Increased productivity in the production of goods and services directly and indirectly required to produce exports,
- Increased use of imported inputs of goods and services by those activities, and
- Changed export product composition.

To increase export employment, export volume must rise more than enough to offset the job-reducing effects of other factors – particularly the effects of increased productivity. Between 1980 and 1987, increased productivity directly accounted for a reduction of over 700,000 export-related jobs – nearly two-thirds of the total 1.2 million reduction in jobs supported by exports (Figure A.6). Job reductions accounted for by the other three factors were far smaller. Between those two years, lower export volume accounted for 16 percent of the total

Figure A.6

Reduction in Export-Related Jobs, by Major Factor, 1980-87



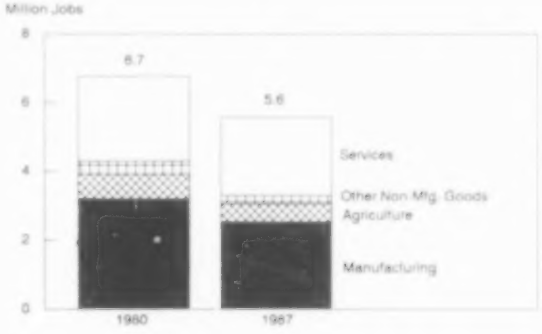
job reduction, increased use of imported inputs 18 percent, and change in export product composition for only 4 percent.

Sectoral Job Performance

Throughout 1980-87 the largest share of jobs generated by exports was in the manufacturing sector. Included are jobs generated both by manufactures exports and by manufactures output used in the production of other sectors' exports (Figure A.7).

Figure A.7

Export-Related Jobs, by Employing Sector, 1980 & 1987



A large share of the total jobs in three of the four sectors are export dependent, with manufacturing slightly more export dependent than any of the other sectors. This dependence of each employing sector in 1987 was as follows:

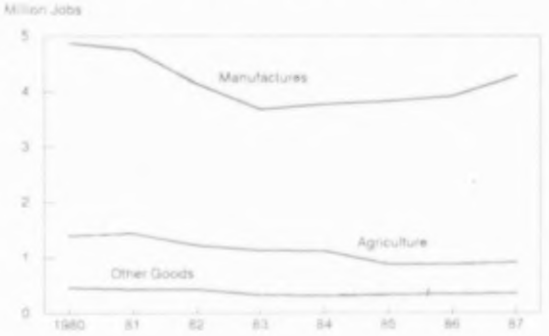
Manufacturing	1 in 6 jobs
Agriculture	1 in 7 jobs
Other goods	1 in 7 jobs
Services	1 in 33 jobs

Although jobs in the services sector are relatively far less dependent on exports than other sectors, the services sector continues to be the second largest employer for export-related jobs. Services jobs are relatively less dependent on exports than other sectors because the services sector is not a direct exporter of merchandise and is far larger than other sectors—accounting for nearly two-thirds of total U.S. GNP. All of these services jobs are indirectly generated by exports of other sectors. The total number of services jobs that are export dependent is nearly as large as in manufacturing. In 1987, for every 11 export-related jobs generated by total exports in manufacturing, 10 in services are supported by exports.

Jobs generated in all sectors by manufactures exports have been steadily rising from their 1983 low as a result of the strong resurgence in the volume of manufactures exports. Of the three goods exporting sectors, manufactures clearly have been the best export-job generator. Not only are far more jobs owed at any one time to manufactures than other exports, by 1987 the total jobs generated in all sectors by manufactures exports had recovered to within 12 percent of their 1980 level (Figure A.8), and this gap was rapidly shrinking in 1988. In contrast, recovery in agricultural export-generated jobs were still short of their 1980 level by 34 percent and other goods exports were short by 22 percent.

Figure A.8

Total Export-Related Jobs Generated in All Sectors, by Exporting Sector, 1980-87



Moreover, manufactures exports' share of total export-related employment has edged up. Among other factors, this share rise reflects a manufactures export volume growth that was more than sufficient to offset the very strong productivity growth in manufactures production.

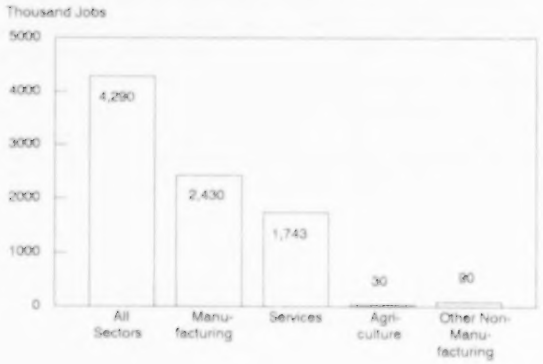
Employment gains from manufactures exports spread to other sectors. Over 40 percent of the total jobs generated by manufactures exports are in other sectors, primarily in services. In 1987, for every 10 jobs in

manufacturing generated by manufactures exports an additional 7 jobs were generated in services (Figure A.9).

High-tech industries account for a smaller share of export-related manufacturing jobs than non-high tech industries. In 1987, jobs in both high-tech and non-high tech industries were rising strongly, however, neither had regained their 1980 levels. Since 1980, export-related jobs in high-tech industries have fared somewhat better than those in non-high tech industries. High-tech jobs were only 6 percent less than in 1980, while non-high tech manufacturing jobs had dropped by 27 percent. As a result, between 1980 and 1987 the high-tech share of all export-related jobs in manufacturing had risen from 32 to 37 percent.

Figure A.9

Manufactures Exports-Generated Jobs, by Employing Sector, 1987

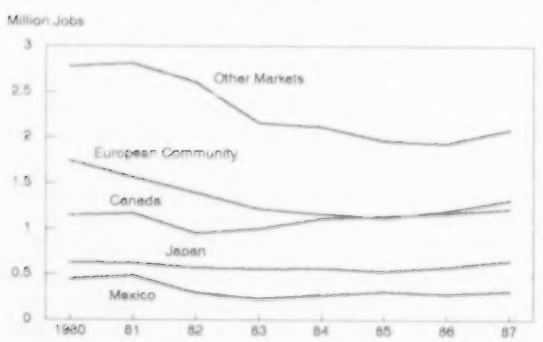


Foreign Market Performance

U.S. jobs generated by exports to most major foreign markets were higher in 1987 than in the prior several years, reflecting the general surge in U.S. exports to those markets. They are likely to have risen strongly again in 1988. Canada is the most important single-country market for generating U.S. export-related jobs – generating in 1987 nearly as many U.S. jobs as exports to the entire 12-country European Community (Figure A.10).

Figur A.10

U.S. Jobs Generated by Exports to Major Foreign Markets, 1980-87



U.S. Business' Need for Uruguay Round Disciplines on Investment and Intellectual Property

By Marjory E. Searing
Director
Office of Multilateral Affairs

The Uruguay Round of multilateral trade negotiations is addressing several issues never before tackled by the General Agreement on Tariffs and Trade (GATT) in such a broad manner. If negotiators can agree on discipline for these "new" issues, such as investment and intellectual property, U.S. business stands to be a big winner.

Introduction

The Uruguay Round is the eighth negotiating "round" held under the auspices of the GATT since its creation in 1948. The first round led to the establishment of the GATT while the last – the Tokyo Round – concluded in 1979.

The first GATT rounds were largely concerned with reducing tariffs, the principal barrier used to protect home markets during this period. Beginning in the 1960s, however, the focus shifted as nations began to rely less on tariff protection and more on nontariff trade restrictions.

Starting with the 1963-67 Kennedy Round and gaining momentum and focus in the 1973-79 Tokyo Round, GATT member countries developed new rules to limit some nontariff measures. Agreements or codes now exist to bring discipline over subsidies, technical barriers to trade, import licensing government procurement practices, customs valuation and antidumping procedures.

Despite progress made to bring discipline over these nontariff measures, protectionist pressures persisted. The United States argued for further negotiations to ensure that the GATT keeps pace with the needs of modern commerce. Particularly disturbing for the United States is the fact that few GATT rules cover trade in agriculture or in other areas of emerging trade importance such as services, investment and intellectual property – the so-called "new" issues. Even when rules do exist that address these issues, they are often unenforceable.

One of the objectives of the Uruguay Round, launched in 1986, is to expand the scope of international rules to cover areas not envisaged by the framers of the GATT. This article provides information on why two of these areas – intellectual property and investment – are priorities for the United States in the Uruguay Round negotiations.

Intellectual Property

The violation of intellectual property rights – generally defined as the unauthorized copying of patented inventions, semiconductor chip mask works, copyrighted works or trademarks, or the unauthorized use of a trade secret – has become a serious problem for the United States in international trade. Counterfeit, pirated or otherwise unauthorized goods span a wide range of industry sectors – from apparel and automotive parts to agricultural chemicals and pharmaceuticals to books, records, films and computer software.

The newly industrialized countries – many of them in the Pacific Basin and Latin America – have increasingly become international trade competitors. At the same time, effective protection of intellectual property in many of these countries lags behind that provided in developed countries. Many newly industrialized countries either have inadequate laws or they fail to enforce them.

The lack of effective intellectual property protection in developing and newly industrialized countries in particular causes three types of trade-related problems for American businesses. First, U.S. production is displaced when illegally traded or unauthorized goods are sold, usually at far cheaper prices, in foreign and domestic markets. While such losses are difficult to pinpoint, the United States International Trade Commission estimates that U.S. businesses lost from $43 billion to $61 billion in 1986 alone due to inadequate protection.[1]

Several U.S. industries also have developed estimates of how much they lose as a result of inadequate protection. The U.S. copyright industries calculate that they lose over $1.3 billion annually, while the U.S. agrochemical industry reports that it loses over $200 million in sales per year. U.S. software vendors estimate that they lose $500 million annually just from the piracy of microcomputer software.[2]

A second source of losses for U.S. firms stemming from piracy and product counterfeiting is the depressing effect of these unfair practices on the level of overseas' remittances from the licensing and assignment of patent rights, trademarks and copyrights. Though any estimate of remittance loss would be purely speculative, U.S. firms garner a good deal of revenue from such agreements, suggesting that the revenue loss is substantial. For example, in 1987 (the latest year for which statistics are available) the United States enjoyed a $6.1 billion surplus in this area which helped to offset the much larger deficit in merchandise trade.

Additionally, the income losses to U.S. firms, coupled with the great expense of enforcing their intellectual property rights, have harmed the future competitiveness of U.S. business. In particular, the enormous research and development (R&D) outlays undertaken at the beginning of a product cycle may never be recouped by many firms due to the activities of pirates and counterfeiters.

This is especially true for industries where development costs are great but the product itself can be inexpensively reproduced. The pharmaceutical industry reports that it can take 10 years and $125 million to $160 million to get a new product on the market, but a chemist can often easily copy a pharmaceutical.[3] If not legally protected, the original developer of the product can be driven from the market by unauthorized copies.

Brand names and reputations of U.S. companies also are diminished by the low quality of counterfeit goods, further affecting U.S. competitiveness.

The above evidence makes it clear why upgraded protection for intellectual property is a priority for U.S. trade policy. The United States is working both bilaterally and multilaterally in the Uruguay Round for stronger protection. Bilateral negotiations have been ongoing since 1981 with such countries as Korea, Singapore and Brazil. These efforts are showing success – Korea has greatly upgraded its laws, and Indonesia may well enact its first patent law this year – but there is still a long way to go. The United States is using the Uruguay Round negotiations to build on this foundation.

The United States would like to see the GATT adopt a broad agreement on the trade-related aspects of intellectual property rights (TRIPs). It has submitted a proposal to the Uruguay Round Negotiating Group on TRIPs which includes the following elements:

- Effective international standards for patents, trademarks, copyrights, semiconductor chip mask works and trade secrets;
- An obligation to enforce these standards, both at the border and internally;
- A trade-based dispute settlement mechanism; and
- Application of GATT concepts, such as transparency and most favored nation, to the area of intellectual property.

This GATT agreement will supplement those aspects of existing international intellectual property agreements administered by the World Intellectual Property

[1] United States International Trade Commission, "Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade," USITC Publication 2065, February 1988.

[2] The Intellectual Property Committee (USA), the Keidanren (Japan) and UNICE (Europe), "Basic Framework of GATT Provisions on Intellectual Property: Statement of Views of the European, Japanese and United States Business Communities," (unpublished joint report), June 1988.

[3] Ibid.

Organization – a United Nations organization – that are inadequate. In the standards area, this is critical because the main international agreements either include very lax standards or are silent in key areas, such as what should be the minimum term for patents.

On enforcement too there is wide variation in national practice. Some customs officials do not even have the authority to stop obvious counterfeits and national penalties may be so low that counterfeiters merely consider them a cost of doing business. Effective dispute settlement procedures are also lacking from existing international agreements. Members can actually opt out of dispute settlement in most cases.

A GATT agreement on trade-related intellectual property measures (TRIPs) will significantly improve the international climate for protection of intellectual property and help to limit trade distortions that now exist due to inadequate standards and ineffective enforcement.

Investment

Foreign direct investment (FDI), both in manufacturing and services, stretches across the globe. World FDI from 1980 to 1984, measured in International Monetary Fund Standard Drawing Rights (SDRs), grew at an average annual percentage rate of 10.9 percent.[4]

People everywhere benefit from expanded domestic capital investment and technology advances that result from increased foreign investment. Unfortunately, investors often face so-called performance requirements, such as limits on their foreign equity participation, local content and export performance requirements, and restrictions on the transfer of earnings and capital, all of which distort trade and investment flows.

The United States, realizing the need for discipline in this area, seized the initiative two years ago and prevailed upon the member countries of the GATT to agree for the first time to discuss trade-related investment measures (TRIMs) in multilateral trade negotiations. In addition to the performance requirements mentioned above, the United States has targeted for action: trade balancing, technology transfer and licensing requirements, product mandating requirements, manufacturing limitations and requirements, and domestic sales requirements. The United States also considers investment incentives as being highly distortive of trade. These 13 measures are a serious hindrance to the free flow of U.S. trade to many countries – the developing countries in particular – and affect both U.S. manufacturing and service sectors.

Performance requirements have three primary effects on the flow of trade: imports into the country in question will be smaller than they would have been in the absence of TRIMs; exports will be artificially induced and increased over the life of the investment; and exports from other countries will be reduced or displaced.

While it is difficult to judge with certainty the distortions to U.S. trade caused by performance requirements, the 1982 U.S. Department of Commerce's *Benchmark Survey* of U.S. direct investment abroad[5] estimates that 14 percent of U.S. affiliates overseas were subject to one or more performance requirements. The manufacturing sector was hit hardest by such measures: 23 percent of the manufacturing affiliates in transportation equipment, electric and electronic equipment, and chemicals and allied products were subject to such requirements.

That survey also provides evidence that performance requirements were more of a problem for U.S. investors in the developing nations than in the developed countries – 28 percent versus 7.5 percent. South American nations have been most likely to impose such measures: Brazil, Colombia, Ecuador, Peru and Venezuela subjected over one-third of U.S. affiliates to these requirements. India's percentage was the highest in Asia and worldwide at 57 percent. Among the developed countries, Turkey, Portugal, and Ireland most often imposed performance requirements on U.S. affiliates – 40 percent, 28 percent and 25 percent, respectively.

Investment incentives also distort trade. Although a particular firm may benefit from incentives granted from a foreign government (often to make up for lost profits caused by the same government's performance requirements), those incentives put competing companies at a disadvantage. According to the *Benchmark Survey*, 32 percent of U.S. affiliates overseas received one or more incentives to invest, usually in the form of tax incentives. Manufacturing industries were almost four times as likely to receive incentives than service industries. Interestingly, an equal percentage of U.S. affiliates in both developing and developed countries also received incentives to invest.

Although it is difficult, as noted above, to measure the effects of TRIMs on an entire industry, it is a bit simpler to quantify the effects of performance requirements and incentives over the lifetime of a specific business deal. One illustrative case concerns a beverage and food processing investment in Asia. The U.S. partner, after three years of hard bargaining, struck a deal for a reported $15.4 million joint venture. In order to gain approval for the project, the U.S. partner was obliged to accept several performance requirements.

In the above case, the U.S. partner will own slightly less than 40 percent equity in the joint venture, in conformance with the host country's mandate on foreign equity ownership. The U.S. firm must also export 50

[4] SDRs are an IMF designed currency unit comprising currencies of France, West Germany, Japan, the United Kingdom, and the United States. Use of SDRs reduces the impact of exchange rate volitility on FDI stock values.

[5] Bureau of Economic Analysis, U.S. Department of Commerce, "U.S. Direct Investment Abroad: 1982 Benchmark Survey Data," December 1985.

percent of its total production during the 10-year contract period, which is expected to result in an estimated $138.5 million in exports. In addition, the firm will be subject to trade-balancing requirements, and remittance and exchange restrictions. Its earnings through exports must be at least five times the outflow of foreign exchange for payment of dividends, profit remittances and import of raw materials.

Another illustrative case concerns a U.S. computer and software manufacturer in Latin America. In the mid-1980s, this U.S. firm reached agreement with a Latin American country to establish a manufacturing site for personal computers. Included among the conditions were a local content requirement of 51 percent in the first year, rising to 82 percent by the end of the fourth year; a guarantee that informatics components from 150 local firms would be used in the U.S. firm's plants abroad; a program to distribute software in Latin America; and an agreement to export 92 percent of production (with export revenues estimated at $620 million).

The above statistics make evident the pressing need to broaden the GATT multilateral discipline to include trade-related investment measures. The United States has also worked to achieve similar goals bilaterally. It has negotiated, ratified and approved eight bilateral investment treaties that are to enter into force once the United States exchanges instruments of ratification with the respective countries. Multilateral negotiations now taking place in the Uruguay Round complement these efforts.

The United States has been very active in the first two years of the Uruguay Round in following the mandate of the Negotiating Group on TRIMs to determine the degree of discipline already present in existing GATT articles and to elaborate additional provisions where this discipline is absent. During the second half of the Uruguay Round, the United States will focus its attention on achieving consensus among the GATT member countries on a list of TRIMs. It will then urge these countries to consider the appropriate form and content of disciplines on TRIMs. U.S. investors have much to gain from the successful negotiation of such an agreement.

Conclusions

Uruguay Round negotiations on "new" issues, such as intellectual property and investment, will help keep the GATT relevant to the changing international trade environment. Governments have turned to these areas to manipulate trade flows as GATT discipline has increased in other nontariff areas, such as subsidies and import licensing and antidumping procedures.

As demonstrated by the evidence presented here, TRIMs and TRIPs have real adverse effects on trade. In the case of TRIPs, the market is effectively closed to a company if it is unable to protect its product through a patent or if its exclusive patent rights are awarded to a domestic manufacturer by a foreign government. Those effects can be likened to an absolute import ban. Likewise, TRIMs are pervasive and distort trade and investment flows. They also harm third country exports. The United States is working for increased discipline in both areas to maximize the competitiveness of U.S. business.

Exports From Debt-Problem LDCs to the Industrial West

By William F. Kolarik, Jr.
Financial Economist
Office of Trade and Investment Analysis

Most debt-problem less developed countries (LDCs) have been unable to achieve major export gains during the 1980s. Their exports remain heavily dependent on U.S. markets and could be adversely affected by future reductions in U.S. trade deficits.

Debtor Exports Fall Short of Expectations

From the beginning of the LDC debt crisis in 1982, it has been widely recognized that a lasting recovery of debtor economies will require steady, substantial growth in the debtors' merchandise exports to the Industrial West (IW). Industrial country markets are the debtors' main source of readily convertible "hard" currencies (such as U.S. dollars, Deutsche marks and yen), which debtors must earn to service external debt and pay for imports from industrial country suppliers.

Unfortunately, most debt-problem LDCs have thus far failed to post hoped-for growth in merchandise exports. Exports from the so-called Baker-15 LDCs to 22 IW nations were only 1.4 percent higher in 1987 (the latest year for which complete data are available) than in 1980 and only 12 percent above the post-debt-crisis low set in 1982 (Figure A.11).[6] (Due to the unreliability of export statistics provided by many debt-problem LDCs, this discussion is based on IW import statistics, valued c.i.f.)

Moreover, export performance by the vast majority of debt-problem LDCs has been more unfavorable than that by the whole group. Comparatively favorable Mexican and Brazilian export performance has tended to mask export declines in the rest of the debtor group. From 1980 to 1987, Mexico's and Brazil's exports to the IW grew by 59 and 51 percent, respectively, while the total exports of the 13 remaining Baker LDCs dropped by 23 percent (Figure A.12).

[6] These 15 nations, the object of former U.S. Treasury Secretary Baker's 1985 and 1987 LDC debt initiatives, are: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Ivory Coast, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

Figure A.11

Exports of 15 Debt-Problem LDCs to the Industrial West, 1980-87

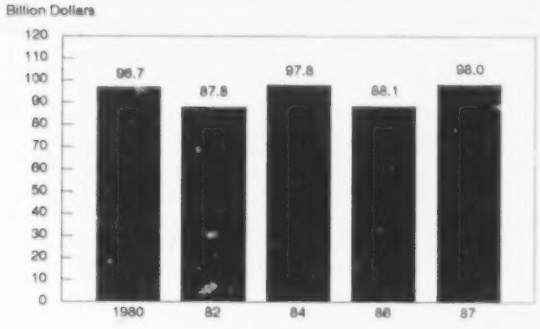
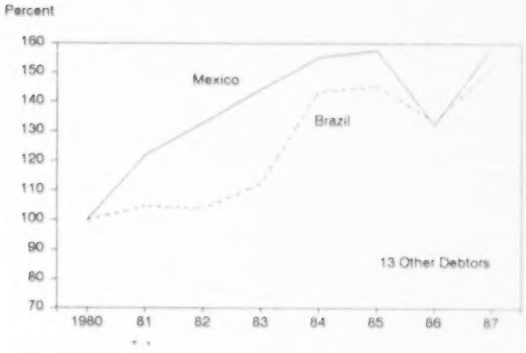


Figure A.12

Exports to the IW by Mexico, Brazil, & 13 Other Debt-Problem LDCs, 1980-87 (Index 1980 = 100)



Debtors Remain Heavily Reliant on U.S. Markets

The Baker-15 LDCs have also had little success diversifying markets. Most debtors, especially those in Latin America, remain heavily dependent on exports to the United States. Indeed, their reliance on U.S. markets has generally increased during the 1980s. In 1987, 50 percent of total debtor exports to the IW went to the United States, up from 43 percent in 1980 (Figure A.13).

In contrast, the European Community in 1987 absorbed 36 percent of debtor exports to industrial countries and Japan took far less – 7.3 percent.

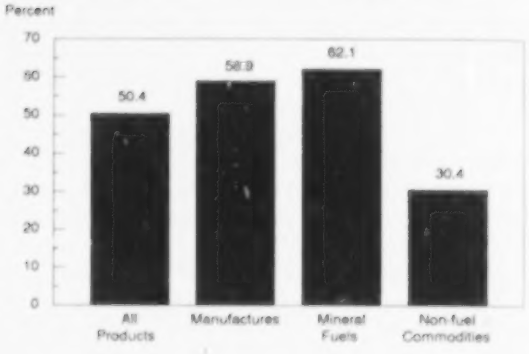
For certain product exports, debtor dependence on U.S. markets has been particularly pronounced. In 1987 the United States accounted for 62 percent of the debtors' mineral fuels exports to the IW, and 59 percent of their manufactures exports.

Factors Undermining Debtor Exports

There are diverse reasons for the lackluster export performance of many debtors. One factor has been the

Figure A.13

U.S. Share of IW Imports from 15 Debt-Problem LDCs, by Product Category, 1987

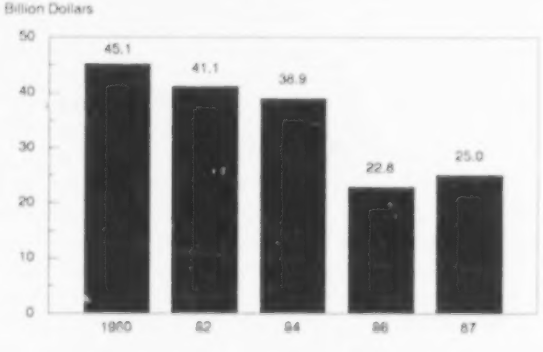


inability of most debtors to sustain corrective economic policies to encourage greater domestic saving and investment – key measures necessary for lasting export growth.

Another factor in recent years has been weak world oil prices – the result of overproduction and diminished demand in industrial economies. The soft petroleum market has hurt export earnings of petroleum-based debtors, especially those with limited non-oil exports (such as Venezuela and Nigeria). Debtor exports of petroleum and other mineral fuels to industrial countries in 1987 were about $25 billion, 39 percent below 1982 exports and 44 percent below 1980 exports (Figure A.14).

Figure A.14

Mineral Fuels Exports by 15 Debt-Problem LDCs to the IW, 1980-87



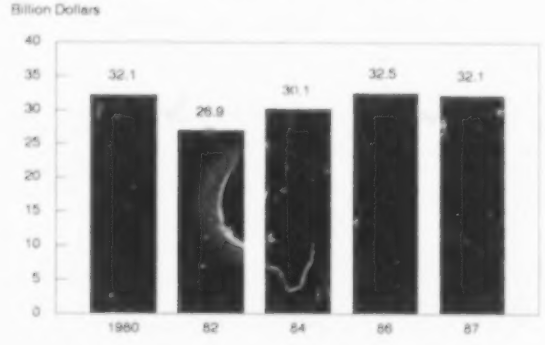
Lackluster exports of non-fuel commodities, traditionally a leading money earner for a host of non-oil LDC exporters, have been another reason for the disappointing export performance of the Baker-15 LDCs. (Non-fuel commodities include agricultural

products, beverages, and crude materials.) Debtor earnings from non-fuel commodity exports to the IW in 1987 were $32 billion, about the same as in 1980 (Figure A.15).

A key factor limiting commodity export earnings has been persistent weak commodity prices. Despite a rebound that began in late 1987, prices for LDC commodities at the end of 1988 were still about 6 percent below their 1980 level.

Figure A.15

Non-Fuel Commodity Exports by 15 Debt-Problem LDCs to the IW, 1980-87



The International Monetary Fund attributes chronically weak commodity prices to slack demand and excess global supplies of many commodities. The IMF's research also suggests that persistent weak demand for some commodities stems partly from technological advances which are causing some displacement of traditional LDC commodity exports by synthetics and other substitutes.

Debtor Exports of Manufactures on the Rise

The only bright spot for debtor exports has been growth in sales of manufactured goods [Standard International Trade Classification (SITC) categories 5-9]. From 1982 to 1987, exports of manufactures to the IW by the Baker LDCs more than doubled, rising from $20 billion to $41 billion annually. Moreover, the share of manufactures in their total exports to the IW grew from 23 to 42 percent (Figure A.16).

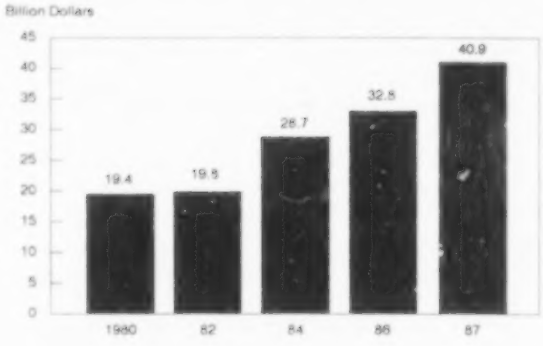
The Baker-15 LDCs have boosted exports of a wide range of manufactured products. Leading growth items include motor vehicle parts and equipment, nonelectric power machinery, clothing, telecommunications equipment, and iron and steel.

Brazil and Mexico Account for Most of Debtors' Manufactures Exports

Gains in manufactures exports have been very uneven among debtor nations. Just two countries – Mexico and Brazil – accounted for 73 percent of 1980-87 growth in

Figure A.16

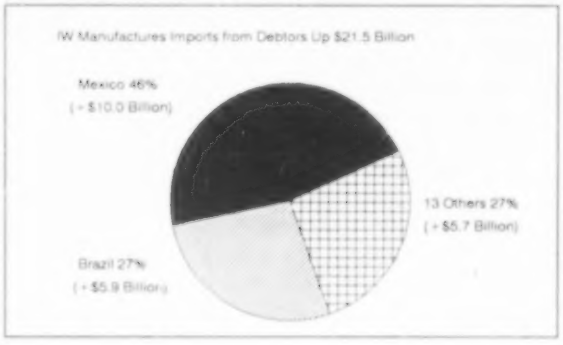
Manufactures Exports by 15 Debt-Problem LDCs to the IW, 1980-87



manufactures exports by debtors. Over this period, Mexico's and Brazil's manufactured exports to the IW grew by 186 percent and 163 percent, respectively, whereas those of the other 13 Baker LDCs grew by a comparatively modest 55 percent (Figure A.17).

Figure A.17

LDC Shares of Total Debt-Problem LDCs' Growth in Manufactures Exports to the IW, 1980-87



Rapid growth of Mexican and Brazilian manufactured exports suggests that both nations have benefited significantly from sizable foreign direct investment in local manufacturing industries. Mexico, in particular, has witnessed a surge of exports from manufacturing facilities built in the northern part of the country with assistance from U.S. and other foreign corporate investors. Production capacity of these facilities has been greatly expanded in recent years.

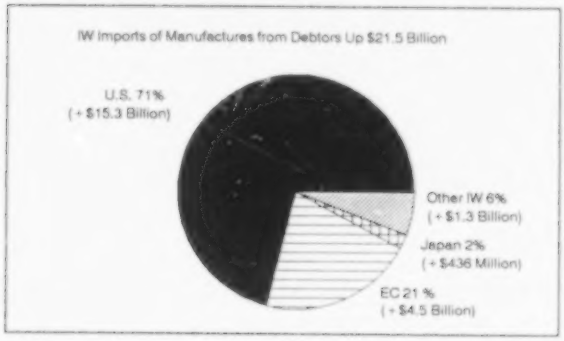
U.S. Markets Crucial to Debtors' Manufactures Export Growth

The heavy dependence of debt-problem LDCs on U.S. markets has been strikingly evident in the debtors' surging exports of manufactures. During 1980-87, U.S.

imports of manufactures from the Baker-15 LDCs increased $15 billion, compared with increases of $4.5 billion for the European Community and $436 million for Japan. As a result, during 1980-87 the United States absorbed 71 percent of the growth in the debtors' manufactures exports to the IW. In contrast, the European Community accounted for 21 percent of this export growth and Japan 2 percent (Figure A.18).

Figure A.18

U.S. & Other IW Shares of Growth in IW Manufactures Imports from 15 Debt-Problem LDCs, 1980-87



The debtors' dependence on U.S. markets for manufactures export growth has been almost complete for a number of products. For example, the United States accounted for 94 percent of 1980-87 growth in debtor exports of electrical distributing machinery to the IW, 91 percent of electric power machinery and switchgear, and 89 percent of telecommunications equipment.

Soaring exports to the United States have transformed some debtors, notably Mexico and Brazil, into important foreign suppliers of a variety of manufactured products to U.S. consumers and industry. In 1987, the Baker-15 LDCs accounted for 49 percent of total U.S. imports of electrical distributing machinery, 17 percent of imports of electric power machinery and switchgear, 16 percent of footwear imports, and 15 percent of imports of nonelectric power machinery.

Although automotive products imported from debt-problem LDCs are still a small share of total U.S. imports of such products, their share is rapidly growing. For instance, U.S. imports of automotive products from Mexico and Brazil nearly doubled from 1986 to 1987 – rising from $1.4 billion to $2.6 billion. This surge accounted for 29 percent of the total 1986-87 increase in U.S. imports of automotive products.

Conclusions and Implications for the Future

Data through 1987 show that although some important debtors like Brazil and Mexico posted significant export gains to the IW, the exports of most debt-problem LDCs benefited little from the IW's economic expansion that began in 1983. This lackluster export response to generally favorable external conditions has undoubtedly impeded international efforts to manage and solve LDC debt problems.

Debtors Highly Vulnerable to U.S Economic Developments

Debtor exports have been closely associated with the lengthy U.S. economic expansion and strong U.S. demand for foreign goods. In particular, debtor gains in manufactures exports have been largely a byproduct of huge U.S. trade deficits since 1982.

Consequently, a key question is the likely impact on debtor exports if there are further sizable cuts in the U.S. trade deficit. The U.S. trade gap – despite improving from $152 billion in 1987 to $120 billion in 1988 – is still widely viewed as far too large to be sustainable. Thus, there may be additional deep cuts in the trade deficit in years ahead.

Will Reductions in U.S. Trade Deficits Hurt Debtor Exports?

The impact on debtor exports of further cuts in the U.S. trade deficit will depend on how the cuts are achieved. If the United States further narrows its trade deficit primarily by means of rapid, sustained export growth, then major harm to debtor exports may be averted. In fact, debtor exports to the United States and other industrial nations could even expand, assuming debtors do not permit their currencies to appreciate in real terms against the dollar and other industrial country currencies.

On the other hand, if large U.S. import cuts ultimately prove necessary to reduce the U.S. trade gap to sustainable levels, then debtor exports to the United States would probably suffer. This seems unavoidable in view of the fact that the U.S. market accounts for about half of the debtors' sales to industrial nations. Moreover, debtor exports to Europe and Japan would probably be hurt because those industrial economies – themselves somewhat reliant on sales to the United States – would be struggling to overcome the dampening effects of U.S. import cutbacks.

U.S. Manufactures Output and Employment Generated by Manufactures Exports, by State and Metropolitan Areas in 1986

By Georg M. Mehl
International Economist
Office of Trade and Investment Analysis

Exports are a vital and dynamic contributor to the industrial output, employment, and economic growth of most individual states and metropolitan areas.

Introduction

Foreign demand for U.S. manufactured products is a vital component of economic activity in all 50 states of the United States. U.S. merchandise exports generate millions of jobs, not only in manufacturing industries, but also in those nonmanufacturing industries whose output supports manufactures production (hereafter referred to as "supporting exports"). In 1986, the U.S. Bureau of the Census estimated that a total of nearly 4.6 million full-time equivalent jobs in all industries were sustained by U.S. sales of manufactures to foreign sources. The total includes 2.3 million jobs in manufacturing industries, and 2.3 million jobs in nonmanufacturing industries such as business services, transportation and communications. To put these numbers into the perspective of the entire U.S. economy, total 1986 civilian employment was 111.9 million; therefore, the percent of domestic jobs sustained by the sales of U.S. manufactures abroad was 4.1 percent – roughly one in every 25 jobs.

In 1986, the U.S. dollar volume of manufactures exports was $159.4 billion (f.o.b. plant value). These direct exports generated about 1.1 million manufacturing jobs. In addition, $135.0 billion of indirect exports – U.S. manufactured goods incorporated as intermediate inputs into directly exported U.S. products – was generated by the direct foreign sales. These intermediate sales in turn sustained roughly 1.2 million more jobs in the manufacturing sector. The total $294.4 billion in U.S. shipments of manufactures related to manufactured exports equalled 13.0 percent of the total value of shipments by the U.S. manufacturing sector in 1986. Thus, more than one out of every eight dollars of manufactures sales by U.S.-based enterprises was earned through exports.

The above 4.6 million jobs do not include the number of workers necessary to produce manufactured goods that go into nonmanufactured exports. For example, the labor that goes into producing tractors used to grow U.S. wheat exports is not counted as employment related to manufactured exports, since the exported product – wheat – is not a manufactured good. Also not included are the number of jobs in nonmanufacturing industries that are sustained by those industries' direct exports. An example of such jobs are the number of farmers needed to produce U.S. agricultural exports.

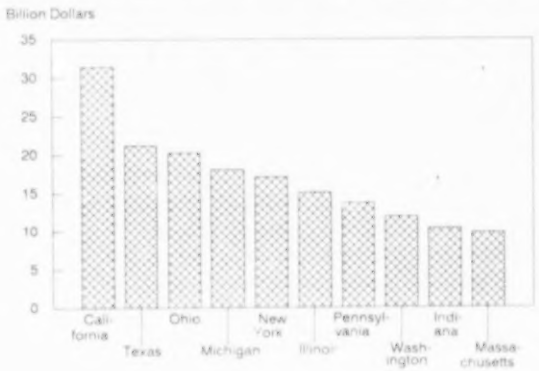
The following state tables and figures only reflect direct and supporting manufactures exports, manufactures shipments, and the related 2.3 million jobs. Not covered are the additional 2.3 million jobs that the Census Bureau estimates are generated by manufactures exports in the nonmanufacturing industries. Such jobs include employment generated by inputs from agriculture, mining, lumber, energy industries, and service industries such as banking, insurance, and transportation.

State Export-Related Output

In 1986, as in previous years, California was the largest source of direct and supporting exports of manufactures, selling an estimated $31.4 billion to foreign demand. Next in order came Texas, with $22.8 billion, then Ohio, Michigan, New York, Illinois, Pennsylvania, Washington, Indiana, and Massachusetts (Figure A.19). Together, these 10 states accounted for over 54 percent of all manufactures exports in 1986. Twenty-nine other states each had at least $1 billion of direct and supporting exports.

Figure A.19

States with Largest Manufactures Shipments Related to U.S. Manufactures Exports in 1986



Another indication of a state's exporting performance is measured by the percentage of its manufactured output that eventually is shipped abroad as direct and supporting manufactures exports, either directly or as components of another product. This measure, known as export intensity, varied widely among the 50 states and the District of Columbia from the national average of 13 percent in 1986. As in previous years, Alaska exported the greatest percentage of its manufactured output – 39.4 percent (Figure A.20). This means that roughly two out

Figure A.20

States with Largest Share of Manufactures Shipments Related to Manufactures Exports in 1986

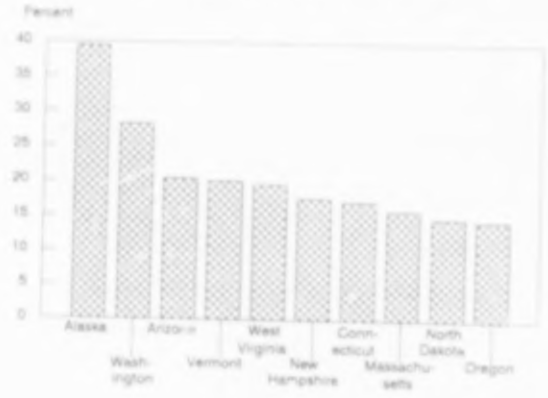
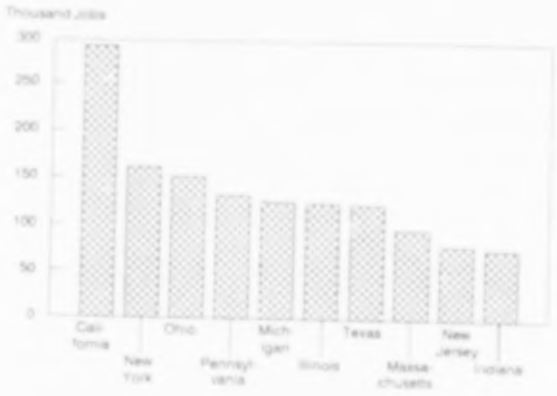


Figure A.21

States with Largest Number of Manufacturing Jobs Related to Manufactures Exports in 1986



of every five dollars earned by Alaska's manufacturing industries came from foreign sales. Alaska was followed in order by Washington (28.2 percent), Arizona (20.4 percent), Vermont (20.1 percent), West Virginia (19.6 percent), New Hampshire (17.6 percent), Connecticut (17.2 percent), Massachusetts (15.9 percent), North Dakota (14.8 percent), and Oregon (14.5 percent). Of these 10 states, only Washington was also ranked among the top 10 states in terms of dollar volume of exports.

The Census Bureau estimated that slightly over 2.3 million jobs in the U.S. manufacturing sector were sustained by direct exports and supporting shipments of manufactured products in 1986. These jobs represent about 12.6 percent of the total number of jobs in manufacturing. In other words, roughly one out of every eight jobs in manufacturing industries, including their administrative and supporting offices, were attributable to foreign demand for U.S. manufactures. This percentage has been steadily rising over the last few years; in 1983 it was 10.8 percent (less than one out of every nine jobs), while in 1984 the percentage rose to 11.4 percent (slightly more than one out of every nine jobs).

California's manufacturing industries had the most export-related jobs – 289,600. In second place was New York, followed by Ohio, Pennsylvania, Michigan, Illinois, Texas, Massachusetts, New Jersey, and Indiana (Figure 7.21). Together, these 10 states accounted for some 59 percent of all the 2.3 million export-sustained manufacturing jobs in the United States that year.

The share of each state's total number of manufacturing jobs that were manufactures export-related varied widely from the national average of 12.6 percent. The state with the largest share was Alaska (40 percent), which, despite its relatively small manufacturing sector, had two out of every five jobs that were export-related. Following Alaska in order were Washington, Vermont, Arizona, Connecticut, Massachusetts, New Hampshire, Minnesota, Oregon, and California (Figure A.22). Of these 10 states, only California and Massachusetts were also among the states with the largest number of export-sustained workers in their manufacturing sectors. A summary of the 50 states' manufactures exports, export intensity, export-related employment, and share of employment that is export-related is given in Table A.2.

Metropolitan Export-Related Output and Employment

In 1986, the Los Angeles - Anaheim - Riverside Consolidated Metropolitan Statistical Area (CMSA) registered over $18.3 billion in direct and supporting manufactures exports. This is well over half of California's entire dollar volume of foreign sales of manufactures that year. To put this number into perspective, only three states (including California) had

Figure A.22

States with the Largest Share of Manufacturing Jobs Related to Manufactures Exports in 1986

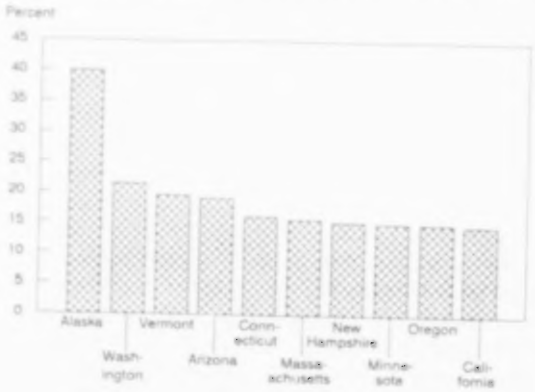


Table A.2

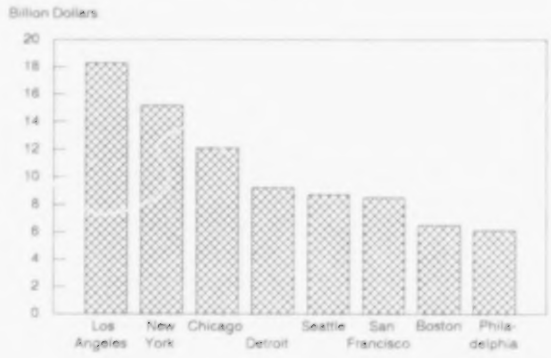
State Manufacturing Output & Employment Related to Manufactured Exports in 1986

State	Export Shipments		Export Intensity		Export Employment		Export-Related Jobs	
	Million Dollars	Rank	Percent	Rank	1,000 Jobs	Rank	Percent	Rank
Alabama	4,409.9	23	12.0	29	31.7	22	9.6	38
Alaska	793.4	43	39.4	1	3.6	43	40.0	1
Arizona	3,615.0	25	20.4	3	31.3	23	19.0	4
Arkansas	2,343.8	32	10.6	38	17.8	31	9.2	42
California	31,437.5	1	14.0	13	289.5	1	14.7	10
Colorado	2,440.7	31	12.2	27	25.3	26	14.0	13
Connecticut	6,186.0	16	17.2	7	63.8	12	16.1	5
Delaware	884.7	40	10.2	44	8.0	40	12.5	22
Dist. of Col.	145.7	51	7.9	51	1.1	49	6.8	50
Florida	6,215.1	15	12.4	25	52.5	16	10.9	32
Georgia	5,864.0	19	8.6	47	42.5	18	7.8	47
Hawaii	317.9	48	10.3	43	0.7	50	3.1	51
Idaho	794.9	42	13.4	19	6.1	42	12.5	22
Illinois	15,133.2	6	12.2	27	123.9	6	12.5	22
Indiana	10,348.9	9	13.7	16	76.0	10	13.2	17
Iowa	3,270.4	26	10.5	40	20.7	28	10.7	35
Kansas	2,861.3	29	9.4	46	20.3	29	10.9	32
Kentucky	4,147.3	35	11.1	35	24.4	27	10.3	37
Louisiana	5,977.3	18	13.6	18	16.7	32	10.5	36
Maine	1,393.0	36	13.8	15	12.1	37	12.0	26
Maryland	3,105.6	28	11.9	30	25.4	25	11.7	29
Massachusetts	9,724.7	10	15.9	8	95.9	8	15.6	6
Michigan	18,098.1	4	12.9	21	125.3	5	13.3	16
Minnesota	6,092.5	17	14.2	12	54.0	15	15.1	8
Mississippi	2,459.4	30	11.3	34	16.7	32	8.2	44
Missouri	6,622.7	14	11.4	32	44.0	17	10.8	34
Montana	318.1	47	10.6	38	1.6	48	7.9	45
Nebraska	1,292.9	38	8.6	47	8.2	40	9.3	41
Nevada	288.1	49	12.9	21	2.7	44	12.9	19
New Hampshire	1,661.7	35	17.6	6	15.5	34	15.2	7
New Jersey	7,688.3	12	10.5	40	80.0	9	11.8	28
New Mexico	451.1	44	11.9	30	2.4	45	7.1	49
New York	17,144.6	5	12.4	25	160.9	2	12.7	20
North Carolina	9,713.7	11	11.4	32	75.5	11	9.4	39
North Dakota	336.5	45	14.8	9	2.0	47	14.2	12
Ohio	20,192.0	3	13.9	14	151.4	3	13.9	14
Oklahoma	2,218.3	33	9.9	45	19.3	30	12.1	25
Oregon	3,162.0	27	14.5	10	27.9	24	15.0	9
Pennsylvania	13,663.4	7	12.6	24	132.0	4	12.7	20
Rhode Island	1,068.9	39	12.7	23	12.9	35	11.9	27
South Carolina	4,944.9	22	13.7	16	39.1	20	11.1	31
South Dakota	336.2	46	8.5	49	2.1	46	7.9	45
Tennessee	5,760.5	20	10.9	36	42.2	19	9.0	43
Texas	21,223.0	2	14.3	11	122.6	7	13.5	15
Utah	1,373.5	37	13.2	20	11.9	38	13.0	18
Vermont	833.9	41	20.1	4	8.4	39	19.5	3
Virginia	5,083.4	21	10.7	37	38.4	21	9.4	39
Washington	11,938.8	8	28.2	2	59.6	13	21.4	2
West Virginia	2,106.7	34	19.6	5	12.4	36	14.4	11
Wisconsin	6,706.6	13	10.5	40	56.5	14	11.6	30
Wyoming	147.2	50	8.0	47	0.5	51	7.4	48

more of their manufactures exported. The New York - Northern New Jersey - Long Island - Connecticut CMSA was second, followed by Chicago, Detroit, Seattle, San Francisco, Boston, Houston, Dallas and Cleveland metropolitan areas (Figure A.23).

Figure A.23

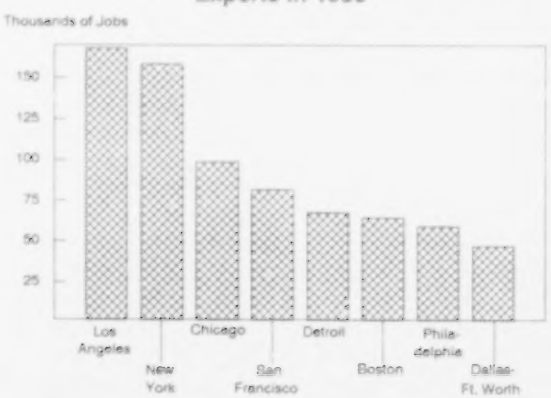
Metropolitan Areas with Largest Manufactures Shipments Related to Exports of Manufactures in 1986



The greater Los Angeles metropolitan area also ranked first in the number of jobs generated by manufactured exports, with 167,600 thousand (Table A.3). This was about 58 percent of California's total. The New York City metropolitan area placed second, with 158,600 thousand jobs, and was followed by the Chicago, San Francisco, Detroit, Boston, Dallas, Cleveland, Seattle, and Minneapolis metropolitan areas (Figure A.24).

Figure A.24

Metropolitan Areas with Largest Numbers of Manufactures Jobs Related to Manufactures Exports in 1986



Methodology

The state data in this report are taken from the U.S. Bureau of the Census publication *Exports From Manufacturing Establishments: 1985 and 1986* (AR86-1). The estimates of manufacturing output and employment related to manufactures exports in 49 of the nation's large metropolitan areas in 1986 are based on the above report as well as selected information taken from individual state publications from the Census Bureau's *1986 County Business Patterns* series. The metropolitan export-related figures include both direct export sales and shipments of manufactures to other U.S. industries who then incorporate these intermediate shipments into their own exports (supporting exports). Metropolitan Statistical Areas (MSAs) and Primary Metropolitan Statistical Areas (PMSAs) are defined as a group of contiguous counties that contain a large urban population. The metropolitan areas with large populations are defined as PMSAs; the rest are considered MSAs. Consolidated Metropolitan Statistical Areas (CMSAs) contain at least two contiguous MSAs or PMSAs; some large metropolises, such as the greater New York metropolitan area, have a half-dozen or more Connecticut, New Jersey and New York state-sized MSA/PMSAs within its boundaries.

The contribution of the MSA/PMSA/CMSA (abbreviated MPC) to its state's (or states') export-related manufactures shipments and employment for each two-digit SIC industry is based on the ratio of MPC workers to the state total for each industry. The MPC's employment in each industry is the sum of the jobs in each metropolitan area's counties, as reported in the *1986 County Business Patterns*. For example, if 10 percent of a state's workers in the chemicals industry have their jobs located in a certain MPC, it is assumed that 10 percent of that state's total chemicals exports and export-related employment in chemicals can be attributed to the MPC. The MPC's total exports of manufactured export-related shipments and employment is the sum of those estimates for each of the manufacturing industries with operations in that metropolitan area.

In a number of cases, the metropolitan area will cover more than one state. For example, the boundaries of greater New York encompass counties in three states, as do the boundaries of Cincinnati and Chicago, while greater Philadelphia's counties lie in four states. Several other MSAs/CMSAs such as Portland (Oregon), Kansas City, St. Louis and Louisville lie in two states. In such cases, the individual industry contributions in each state area are separately estimated and then simply added together, industry by industry. Finally, the combined industries are added up to arrive at the total number of export-related jobs and shipments for the entire metropolitan area.

More details on the export profiles of individual manufacturing industries operating in each state will be

provided in the forthcoming publication by the Office of Trade and Investment Analysis, International Trade Administration, entitled *Origin of Exports of Manufactured Products; Profiles of the 50 States and 49 Selected Metropolitan Areas in 1986*. The publication will also detail the major export industries operating in each of the 49 selected metropolitan areas.

Table A.3

Manufactures Employment & Shipments Related to Manufactures Exports in 49 Major U.S. Metropolitan Areas in 1986

Metropolitan Area	Employment 1,000 Jobs)	Shipments (Million $)
Albany - Schenectady - Troy, NY	6.2	700
Atlanta, GA	7.2	2,342
Baltimore, MD	17.3	2,255
Birmingham, AL	5.7	798
Boston - Lawrence - Salem - Lowell - Brockton, MA	64.8	6,494
Buffalo - Niagara Falls, NY	13.6	1,690
Charlotte - Gastonia - Rock Hill NC, SC	14.2	1,858
Chicago - Gary - Lake Co. IL, IN, WI	98.3	12,074
Cincinnati, OH, IN, KY	22.1	3,103
Cleveland - Akron - Lorain Co., OH	43.5	5,262
Columbus, OH	13.6	1,729
Dallas - Ft. Worth, TX	47.7	5,547
Dayton - Springfield, OH	14.2	1,849
Denver - Boulder, CO	21.2	1,590
Detroit - Ann Arbor, MI	67.7	9,185
Greenville - Spartanburg, SC	11.3	1,313
Greensboro - Winston-Salem High Point, NC	14.7	1,846
Hartford - New Britain - Middletown - Bristol, CN	21.9	2,239
Houston - Galveston - Brazoria, TX	26.8	5,654
Indianapolis, IN	12.6	1,702
Jacksonville, FL	3.1	438
Kansas City, MO, KN	13.4	1,777
Little Rock, AK	3.3	417
Los Angeles - Anaheim Riverside, CA	167.6	18,312
Louisville, KY, IN	15.7	1,395
Miami - Ft. Lauderdale, FL	12.5	1,374
Milwaukee - Racine, WI	25.2	2,800
Minneapolis - St. Paul, MN, WI	39.4	4,069
New Haven - Waterbury - Meriden, CT	11.6	1,151
New Orleans, LA	3.9	1,391
New York - N. New Jersey - Long Island - Connecticut	158.6	15,196
Oklahoma City, OK	5.9	674
Omaha, NE, IA	3.2	495
Orlando, FL	4.0	456
Philadelphia - Wilmington - Trenton PA, NJ, DE, MD	59.5	6,142
Phoenix, AZ	24.2	2,632
Pittsburgh - Beaver Valley, PA	21.8	2,124
Portland - Vancouver, OR, WA	19.1	2,019
Rochester, NY	21.4	2,368
Sacramento, CA	3.6	427
Salt Lake City - Ogden, UT	9.3	1,013
San Antonio, TX	4.0	561
San Diego, CA	19.9	2,029
San Francisco - Oakland - San Jose, CA	81.5	8,503
St. Louis, MO, IL	26.9	3,547
Seattle - Tacoma, WA	42.0	8,704
Springfield, MA	7.3	849
Tampa - St. Petersburg - Clearwater, FL	10.1	1,098
Tulsa, OK	7.7	752

APPENDIX B
STATISTICS

Data Notes

The U.S. merchandise trade data in this report differ between those originally reported by the Bureau of the Census, U.S. Department of Commerce, and those transformed for balance-of-payments reporting by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. Merchandise trade data are initially produced by Census from records obtained directly from international shipments by the Bureau of Customs, U.S. Treasury Department.

The U.S. services trade data in this report are produced by BEA from its own surveys and Census merchandise trade data for reporting the U.S. balance of payments and the U.S. income and product accounts. The services and other balance-of-payments data in this report reflect revisions made by BEA through June 1989.

Merchandise Trade Data

U.S. merchandise exports to and imports from foreign countries consist of government and nongovernment shipments.

All Census total U.S. merchandise trade data in this report for 1984-88 are those reported by Census on a revised basis through April 1989. Totals for 1970-88 include Census estimates for undocumented U.S. exports to Canada.

The U.S. country and commodity merchandise trade data in this report are on the same basis as the data first released each month by Census. That is, merchandise export data are the total of domestic and reexported or foreign merchandise valued on a f.a.s. basis (free along side the international carrier at the port of exportation). Unless otherwise indicated, all U.S. export data include Military Grant Aid (MGA) and Special Category shipments. Merchandise import data are for general imports, valued on a Customs basis (excludes international insurance and freight charges). General imports (in contrast to imports for consumption) reflect total arrivals of merchandise, either immediately entering consumption channels, or entering warehouse storage or processing under Customs' custody.

The merchandise trade data in this report on product sectors or classes for the years before 1988 have been adjusted using the foreign trade classification concordance provided by Census for 1988. These adjustments were made to improve the comparability of those classes for the entire period. As a result, the data for individual sectors or classes for prior years may differ slightly from those reported in Census publications.

In this report "manufactures" trade covers commodity sections 5-9 of Schedule A (imports) and Schedule E (exports) Census foreign trade classifications. Other commodity aggregations, such as "agricultural" trade, conform with standard Census merchandise trade data classification groupings. Manufactures include Census estimates for the total undocumented U.S. exports to Canada, as they are reported by Census in Schedule E, Section 9.

For more detailed trade data, see the ITA publication *U.S. Foreign Trade Highlights 1988*. For additional information on foreign trade data methodology, refer to the ITA publication *Understanding United States Foreign Trade Data*.

The data on high-tech trade are based on the U.S. Department of Commerce DOC-3 definition. A list of the products covered and basis of definition will be supplied on request. All of these products are manufactures.

In this report the major country groups and the countries included are:

European Community: Belgium, Denmark, France, West Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

OPEC (Organization of Petroleum Exporting Countries): Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Western Hemisphere Developing Countries (Latin America): All countries of North and South America (including the Caribbean Islands nations), except Canada, Cuba, and the United States.

East Asian NICs (Newly Industrialized Countries): Hong Kong, Singapore, South Korea, and Taiwan.

CPEs (Centrally Planned Economies): Albania, Bulgaria, Cambodia, China, Cuba, Czechoslovakia, East

Germany, Hungary, Laos, Mongolia, North Korea, Poland Romania, the U.S.S.R., and Vietnam.

Business Services Data

Business services are those provided to facilitate merchandise trade (mainly international insurance and freight) and other business services such as tourism, passenger transportation, other insurance, financial services, and fees and royalties. These business services do not include services provided directly by governments. The business services data in this report do not include international income from interest payments and dividends, as such transactions do not relate directly to international trade in merchandise or services.

Business services are classified as imports or exports according to the nation that provides them. For example, international transportation services provided by a foreign-owned transport line to bring imported merchandise to the United States are U.S. transportation imports.

Census Schedules A and E Product Composition

The following products are covered in the 2-digit groups described in Chapter 3 of this report.

Section 5--Chemicals and Related Products

51--*Organic Chemicals:* Hydrocarbons, specified cyclic organic chemicals, alcohol mixtures, pesticides, plasticizers, and fatty substances.

52--*Inorganic Chemicals:* Radioactive and associated materials, non-radioactive isotopes, uranium oxide, chemical elements, inorganic acids, ammonia, and inorganic drugs.

53--*Dyeing, Tanning, and Coloring Materials--Natural and Synthetic:* Color toners, synthetic dyes, dyeing and tanning extracts, paints, varnishes, lacquers, enamels, glazes, and related products.

54--*Medicinal and Pharmaceutical Products:* Vitamins, antibiotics, vaccines, glycosides, and other pharmaceutical products.

55--*Essential Oils and Perfume Materials, Toilet, Polishing and Cleansing Preparations:* Oils perfumes, deodorant preparations, cosmetics, soaps, washing agents, and shoe polish.

56--*Fertilizers and Fertilizer Materials, Not Specifically Provided for.*

57--*Explosives and Pyrotechnic Products:* Explosives, blasting caps, fireworks, and signal flares.

58--*Synthetic Resins, and Rubber or Plastic Materials, Including Waste and Scrap:* Cellulosic plastic materials, hardened protein resins, modified natural resins, rubber containing processing chemicals, rubber cements, plastic products, rubber and plastic films, and waste and scrap.

59--*Chemical Materials and Products, Not Specifically Provided For:* Pesticides, gelatin, cornstarch, tall oil, turpentine, waxes, preparations for fire extinguishers, and miscellaneous chemical products.

Section 6--Manufacture Goods Classified Chiefly by Material

61--*Leather, Leather Manufactures, Not Specifically Provided For, and Dressed Fur Skins:* Sheep, horse, lamb and pig leather; machine belting of leather, and dressed fur skins.

62--*Rubber or Plastic Tires and Tubes:* Pneumatic and non-pneumatic tires for cars, trucks, and buses; tubes for tires.

63--*Cork and Wood Manufactures, Excluding Furniture:* Sheets, slabs, and articles of cork; plywood, wood blocks, and wood manufactures; barrels and wood for decorative use.

64--*Paper, Paperboard, and Manufactures Thereof:* Newsprint paper, paperboard, paper pulp, stationery, paper sanitary products, and paper bags.

65--*Textile Yarn, Fabrics, Made-Up Articles and Related Products:* Silk, wool, cotton, nylon, and man-made threads and yarn; woven cotton fabrics; woven man-made fabrics; silk, wool woven fabrics; knit fabrics; narrow fabrics; elastic yarns, cordage, and braids; hoses, and linoleum floor coverings.

66--*Nonmetallic Mineral Manufactures, Not Specifically Provided For:* Lime, cement, clay; unworked sheet and plate glass; glassware, pottery, and diamonds.

67--*Iron and Steel:* Pig iron; iron or steel ingots, rods, plates, sheets, etc.; iron or steel castings, wires, etc.

68--*Nonferrous Metals:* Silver, platinum, copper, nickel, lead, zinc, tin, tungsten, and related alloys.

69--*Manufactures of Metal, Not Specifically Provided For:* Iron and steel structures; metal containers; fencing; tacks, nuts, bolts, etc.; hand tools, cutlery, heating and cooking apparatus, chains, springs, anchors, and household appliances.

Section 7--Machinery and Transport Equipment

71--*Power Generating Machinery, and Parts Thereof, Not Specifically Provided For:* Steam boilers, engines, turbines, and parts thereof; aircraft and marine engines; rocket turbines; electric motors and generators; nuclear reactors.

72--*Machinery Specialized for Particular Industries:* Farming equipment, engineering machinery, leatherworking machinery, textile machinery, printing presses, flour and grain mill machinery, and other related machinery.

73--*Metalworking Machinery:* Metal-cutting and forming machine tools, ingot molds, casting machines, rolling mills, and various welding and brazing equipment.

74--*General Industrial Machinery and Equipment, Not Specifically Provided For, and Machine Parts, Not Specifically Provided For:* Oil and gas burners for heating air-conditioning machines, pumps, air or gas compressors, forklifts, fans, valves, and parts thereof not specifically provided for.

75--*Office Machines and Automatic Data Processing Equipment and Parts, Not Specifically Provided For:* Typewriters, calculators, computers and related peripherals, copiers, and parts thereof not specifically provided for.

76--*Telecommunications and Sound Recording and Reproducing Apparatus and Equipment: Televisions,* radios, phonographs, microphones, loudspeakers, radio transmitters and receivers, and telegraph equipment.

77--*Electrical Machinery, Apparatus and Appliances, Not Specifically Provided For, and Electrical Parts Thereof:* Transformers, printed circuit boards, insulated conductors, X-ray equipment, household refrigerators and dishwashers, shavers, integrated circuits, and other electrical apparatus not specifically provided for.

78--*Road Vehicles:* Automobiles, buses, trucks, motorcycles, trailers, and parts thereof.

79--*Transport Equipment, Not Specifically Provided For:* Trains, airplanes, spacecraft, ships, boats, and parts thereof.

Section 8--Miscellaneous Articles

81--*Sanitary, Plumbing, Heating and Lighting Fixtures, Fittings, Lamps and Parts Thereof:* Warm air furnaces, cooking apparatus, sanitary and plumbing fixtures, and light fixtures and fittings.

82--*Furniture and Parts Thereof:* Furniture, including mattresses, bedsprings, pillows cushions, and parts thereof.

83--*Travel Goods, Handbags, and Other Personal Goods.*

84--*Articles of Apparel and Clothing Accessories:* Clothing for men, women, and children, both of natural and Man-made materials, including headware, gloves, and rainwear.

85--*New Footwear Except Military and Orthopedic Wear.*

86--*Professional, Scientific, and Controlling Instruments and Apparatus Not Specifically Provided For:* Optical instruments, medical instruments not specifically provided for, meters and counters such as tachometers and gas meters, compasses, meteorological and geophysical instruments, and others not specifically provided for.

88--*Photographic Apparatus, Equipment and Supplies and Optical Goods, Not Specifically Provided For, and Watches and Clocks:* Cameras, motion-picture cameras; photographic supplies, chemicals, and film; lenses and prisms; spectacles and frames; watches and clocks.

89--*Miscellaneous Manufactured Articles, Not Specifically Provided For:* Printed matter, baby carriages, children's toys, non-military arms and ammunition, art pieces, jewelry, musical instruments, umbrellas, brooms, and buttons.

Section 9--Commodities and Transactions Not Classified Elsewhere

93--*Special Transactions Not Classified According to Kind.* Includes undocumented exports to Canada.

94--*Live Animals, Not Specifically Provided For, Including Zoo Animals, Dogs, Cats, Insects, and Birds.*

95--*Arms of War and Ammunition, Armored Fighting Vehicles, Military Equipment Not Identified by Kind, and Military Apparel.*

96--*Coins, Other Than Gold, Not Being Legal Tender.*

97--*Nonmonetary Gold, Excluding Gold Ores and Concentrates.*

99--*Low Value Shipments.*

Table B.1

Total U.S. Merchandise Trade, 1970-88
(Domestic and foreign exports, f.a.s; General imports, customs value)
(Billions of dollars)

	Exports	Imports	Balance	Percent Change from Preceding Year	
				Exports	Imports
1970.....	43.8	40.4	3.4	--	--
1971.....	44.7	46.2	-1.5	2.0	14.4
1972.....	50.5	56.4	-5.9	13.0	22.1
1973.....	72.5	70.5	2.0	43.6	25.0
1974.....	100.0	102.6	-2.5	37.9	45.5
1975.....	109.3	98.5	10.8	9.3	-4.0
1976.....	117.0	123.5	-6.5	7.0	25.4
1977.....	123.1	151.0	-27.8	5.3	22.3
1978.....	145.9	174.8	-28.8	18.4	15.8
1979.....	186.5	209.5	-22.9	27.8	17.8
1980.....	225.7	245.3	-19.5	21.0	21.4
1981.....	238.7	261.0	-22.3	5.8	6.4
1982.....	216.4	244.0	-27.5	-9.4	-6.5
1983.....	205.6	258.0	-52.4	-5.0	5.7
1984.....	224.0	330.7	-106.7	8.9	28.2
1985.....	218.8	336.5	-117.7	-2.7	1.8
1986.....	227.2	365.4	-138.3	3.8	8.6
1987.....	254.1	406.2	-152.1	11.8	11.2
1988.....	321.8	441.6	-119.8	26.6	8.7

NOTE: Includes U.S. Virgin Islands trade with foreign countries beginning with 1981, and special category exports and undocumented exports to Canada.

Table B.2
Total U.S. Merchandise Trade, by Region, 1981-88
(Domestic and foreign exports, f.a.s.; General imports, customs value)
(Millions of dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1987-88 Change $	1987-88 Change %
EXPORTS:											
World	225,722	238,686	216,442	205,639	223,999	218,828	227,159	254,122	321,813	67,691	26.6
Developed Countries	135,946	141,045	126,841	128,075	141,137	140,054	151,626	165,375	206,200	40,824	24.7
Canada	40,331	44,602	37,887	43,345	51,777	53,287	55,512	59,814	70,862	11,048	18.5
Japan	20,790	21,823	20,966	21,894	23,575	22,631	26,882	28,249	37,732	9,483	33.6
European Community	58,855	57,010	52,361	48,439	50,498	48,994	53,154	60,575	75,871	15,296	25.3
Other Developed	15,970	17,609	15,627	14,397	15,288	15,142	16,078	16,737	21,734	4,997	29.9
Developing Countries	80,937	88,793	82,538	72,186	74,418	71,671	70,637	81,691	106,896	25,205	30.9
Western Hemisphere	38,718	42,102	33,591	25,725	29,683	31,019	31,077	34,979	43,919	8,939	25.6
Mexico	15,145	17,789	11,817	9,082	11,992	13,635	12,392	14,582	20,643	6,061	41.6
Brazil	4,344	3,798	3,423	2,557	2,640	3,140	3,885	4,040	4,289	249	6.2
Other West Hemisphere	19,230	20,515	18,351	14,086	15,052	14,245	14,800	16,357	18,986	2,629	16.1
East Asia NICs	14,741	15,059	15,563	16,914	17,723	16,918	18,290	23,547	34,881	11,334	48.1
Other Developing	27,478	31,632	33,384	29,547	27,012	23,735	21,270	23,164	28,096	4,932	21.3
Centrally Planned Economies	7,643	7,872	6,557	5,088	7,217	7,092	5,127	5,723	8,711	2,988	52.2
China	3,755	3,603	2,912	2,173	3,004	3,856	3,106	3,497	5,039	1,541	44.1
U.S.S.R.	1,513	2,340	2,593	2,003	3,284	2,423	1,248	1,480	2,768	1,288	87.0
Eastern Europe	2,347	1,906	1,017	888	904	792	742	720	885	165	22.9
Miscellaneous	-2,077	-3,212	-6,026	-5,560	-3,749	-5,436	-4,595	-4,090	-5,333	-1,243	30.4
IMPORTS:											
World	245,262	260,978	243,949	258,047	325,725	345,276	369,961	406,241	441,574	35,333	8.7
Developed Countries	125,363	141,073	141,597	152,181	200,713	223,310	245,956	256,553	278,040	21,488	8.4
Canada	41,025	45,912	46,477	52,130	66,478	69,006	68,253	71,085	81,496	10,411	14.6
Japan	30,867	37,655	37,744	41,183	57,135	68,783	81,911	84,575	89,802	5,227	6.2
European Community	38,211	43,425	44,302	45,712	60,227	67,822	75,736	81,188	84,942	3,754	4.6
Other Developed	15,261	14,081	13,074	13,156	16,872	17,698	20,056	19,705	21,800	2,096	10.6
Developing Countries	113,450	116,448	98,996	102,259	119,789	116,164	117,231	141,129	153,142	12,013	8.5
Western Hemisphere	37,102	39,055	37,988	41,743	47,895	46,909	41,949	46,869	51,272	4,403	9.4
Mexico	12,573	13,799	15,566	16,776	18,020	19,132	17,302	20,271	23,277	3,006	14.8
Brazil	3,715	4,469	4,285	4,946	7,526	7,526	6,813	7,865	9,324	1,459	18.6
Other West Hemisphere	20,813	20,787	18,137	20,021	22,349	20,251	17,834	18,733	18,671	-63	-0.3
East Asia NICs	17,779	20,902	22,264	27,614	36,366	39,066	46,136	57,664	63,231	5,567	9.7
Other Developing	58,570	56,592	38,743	32,903	35,529	30,189	29,147	36,596	38,639	2,043	5.6
Centrally Planned Economies	2,497	3,456	3,357	3,607	5,223	5,802	6,774	8,219	10,675	2,456	29.9
China	1,058	1,895	2,284	2,244	3,065	3,862	4,771	6,293	8,512	2,219	35.3
U.S.S.R.	454	348	228	347	554	409	558	425	578	153	36.1
Eastern Europe	982	1,207	839	1,011	1,599	1,527	1,443	1,498	1,580	82	5.5
Miscellaneous	-	-	-	-	-	-	-	340	-284	-624	-183.4
BALANCE:											
World	-19,540	-22,292	-27,508	-52,408	-101,726	-126,448	-142,803	-152,119	-119,760	32,359	-
Developed Countries	10,582	-29	-14,755	-24,106	-59,575	-83,256	-94,330	-91,178	-71,841	19,337	-
Canada	-694	-1,309	-8,590	-8,785	-14,701	-15,719	-12,741	-11,271	-10,634	636	-
Japan	-10,077	-15,832	-16,778	-19,289	-33,560	-46,152	-55,030	-56,326	-52,070	4,256	-
European Community	20,644	13,585	8,059	2,727	-9,730	-18,828	-22,582	-20,613	-9,070	11,543	-
Other Developed	709	3,528	2,553	1,241	-1,585	-2,556	-3,978	-2,968	-66	2,901	-
Developing Countries	-32,513	-27,656	-16,458	-30,073	-45,371	-44,492	-46,595	-59,438	-46,246	13,191	-
Western Hemisphere	1,616	3,047	-4,397	-16,018	-18,212	-15,890	-10,872	-11,890	-7,353	4,537	-
Mexico	2,571	3,990	-3,749	-7,694	-6,028	-5,497	-4,910	-5,689	-2,633	3,055	-
Brazil	629	-671	-862	-2,389	-4,886	-4,386	-2,928	-3,825	-5,035	-1,210	-
Other West Hemisphere	-1,583	-272	214	-5,934	-7,297	-6,007	-3,034	-2,376	315	2,691	-
East Asia NICs	-3,038	-5,743	-6,701	-10,700	-18,643	-22,148	-27,846	-34,117	-28,350	5,766	-
Other Developing	-31,092	-24,959	-5,360	-3,356	-8,517	-6,454	-7,877	-13,431	-10,543	2,888	-
Centrally Planned Economies	5,145	4,416	3,200	1,481	1,994	1,290	-1,647	-2,496	-1,963	532	-
China	2,697	1,708	628	-71	-61	-6	-1,665	-2,796	-3,473	-677	-
U.S.S.R.	1,059	1,993	2,365	1,656	2,730	2,014	689	1,055	2,190	1,135	-
Eastern Europe	1,365	700	178	-124	-696	-735	-701	-778	-695	83	-
Miscellaneous	-2,077	-3,212	-6,026	-5,560	-3,749	-5,436	-4,595	-4,430	-5,049	-619	-

NOTE: Includes U.S. Virgin Islands trade with foreign countries, except for individual trading partner data for 1980. World trade total for 1985 includes $126 million of exports to international organizations. Includes special category (military type goods) and undocumented exports to Canada. "Miscellaneous" includes revisions, carryover, and transshipments.

Table B.3

U.S. Manufactures 1/ Exports to Individual Countries, 1980-88
(Domestic and Foreign Merchandise, f.a.s.)
(Millions of dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1987-88 Change $	1987-88 Change %
EXPORTS:											
World	160,651	171,749	155,305	148,467	163,591	167,791	179,937	200,047	255,272	55,225	27.6
Developed Countries	97,402	102,261	90,034	94,298	107,400	110,827	122,718	133,573	167,988	34,415	25.8
Canada	34,518	38,759	32,666	38,168	46,102	48,470	50,999	54,737	65,400	10,663	19.5
Japan	8,947	10,080	9,984	10,815	12,110	12,345	16,876	16,320	21,966	5,644	34.6
European Community	40,368	38,700	34,585	33,560	36,725	36,843	40,744	47,884	61,358	13,474	28.1
Other Developed	13,568	14,722	12,799	11,754	12,462	13,169	14,099	14,632	19,265	4,633	31.7
Developing Countries	61,220	67,508	63,288	52,064	53,572	52,959	53,618	62,852	82,815	19,963	31.8
Western Hemisphere	30,208	33,529	26,042	18,286	21,679	23,577	24,816	28,262	35,703	7,441	26.3
Mexico	11,681	14,421	9,189	6,496	9,082	10,846	10,424	12,245	17,039	4,794	39.1
Brazil	3,301	2,816	2,539	1,774	1,764	2,217	2,859	3,324	3,790	467	14.0
Other West Hemisphere	15,226	16,291	14,314	10,015	10,833	10,514	11,533	12,694	14,874	2,180	17.2
East Asia NICs	9,952	9,789	10,537	11,241	12,050	11,673	13,038	17,020	26,582	9,562	56.2
Other Developing	21,060	24,191	26,709	22,537	19,843	17,709	15,764	17,570	20,530	2,959	16.8
Centrally Planned Economies	2,029	1,980	1,984	2,105	2,620	4,006	3,602	3,622	4,470	848	23.4
China	1,229	1,141	1,074	1,331	1,956	3,180	2,708	2,788	3,572	784	28.1
U.S.S.R.	427	561	603	498	404	477	529	490	530	39	8.0
Eastern Europe	372	267	273	253	237	327	333	317	348	31	9.7
IMPORTS:											
World	132,987	149,752	151,728	171,189	231,340	257,919	297,035	324,935	361,671	36,735	11.3
Developed Countries	99,302	110,329	111,026	121,376	165,268	188,329	216,105	224,281	244,224	19,943	8.9
Canada	27,179	31,070	31,825	36,076	48,589	50,459	52,880	54,360	63,355	8,995	16.5
Japan	30,471	37,285	37,365	40,731	56,557	68,120	81,243	83,914	89,151	5,238	6.2
European Community	32,209	33,437	33,620	35,735	48,559	56,874	66,247	71,186	75,337	4,151	5.8
Other Developed	9,443	8,538	8,215	8,834	11,563	12,876	15,734	14,822	16,382	1,560	10.5
Developing Countries	31,883	37,219	38,504	47,446	62,663	65,864	75,892	94,187	108,787	14,601	15.5
Western Hemisphere	8,597	10,299	10,213	12,971	17,101	17,856	19,473	23,717	29,637	5,920	25.0
Mexico	4,374	5,228	5,305	6,296	8,198	9,117	10,567	13,791	17,393	3,603	26.1
Brazil	1,350	1,829	1,834	2,515	4,158	4,295	4,252	4,901	6,045	1,144	23.4
Other West Hemisphere	2,874	3,242	3,074	4,161	4,746	4,444	4,654	5,026	6,199	1,173	23.3
East Asia NICs	17,165	20,098	21,550	26,835	35,377	37,783	44,958	56,268	62,004	5,736	10.2
Other Developing	6,120	6,822	6,741	7,639	10,185	10,225	11,462	14,201	17,146	2,944	20.7
Centrally Planned Economies	1,802	2,203	2,199	2,368	3,410	3,726	5,039	6,467	8,659	2,191	33.9
China	736	1,170	1,440	1,600	2,196	2,587	3,822	5,387	7,408	2,022	37.5
U.S.S.R.	411	210	193	244	321	270	431	257	296	39	15.0
Eastern Europe	653	822	564	524	891	869	785	823	954	131	15.9
BALANCE:											
World	27,665	21,997	3,578	-22,722	-67,749	-90,128	-117,098	-124,888	-106,398	18,490	-
Developed Countries	-1,900	-8,069	-20,992	-27,078	-57,868	-77,502	-93,387	-90,708	-76,237	14,471	-
Canada	7,339	7,689	842	2,092	-2,487	-1,990	-1,881	377	2,046	1,669	-
Japan	-21,523	-27,205	-27,381	-29,916	-44,447	-55,775	-64,368	-67,594	-67,187	407	-
European Community	8,159	5,263	965	-2,175	-11,834	-20,031	-25,503	-23,301	-13,978	9,323	-
Other Developed	4,125	6,184	4,583	2,920	900	293	-1,636	-190	2,883	3,073	-
Developing Countries	29,337	30,289	24,784	4,619	-9,091	-12,906	-22,274	-31,335	-25,973	5,362	-
Western Hemisphere	21,611	23,229	15,829	5,315	4,578	5,721	5,343	4,545	6,066	1,521	-
Mexico	7,307	9,193	3,884	201	885	1,729	-143	-1,546	-355	1,191	-
Brazil	1,951	987	705	-741	-2,393	-2,078	-1,392	-1,577	-2,254	-678	-
Other West Hemisphere	12,353	13,049	11,240	5,855	6,087	6,070	6,879	7,667	8,675	1,007	-
East Asia NICs	-7,213	-10,310	-11,013	-15,595	-23,327	-26,110	-31,920	-39,248	-35,422	3,826	-
Other Developing	14,939	17,369	19,968	14,899	9,658	7,483	4,303	3,369	3,384	15	-
Centrally Planned Economies	228	-223	-215	-263	-790	280	-1,437	-2,846	-4,189	-1,343	-
China	492	-29	-365	-268	-240	594	-1,113	-2,598	-3,836	-1,237	-
U.S.S.R.	16	351	410	255	83	207	97	233	234	1	-
Eastern Europe	-282	-554	-291	-271	-654	-542	-451	-505	-606	-100	-

NOTE: Manufactured goods are defined as U.S. merchandise schedules A (imports) and E (exports) 5-9. Includes U.S. Virgin Islands trade with foreign countries, except for 1980. World total for 1985 includes $126 million of exports to international organizations. Includes special category (military type goods) exports and undocumented exports to Canada.

Table B.4

U.S. Agricultural Exports to Individual Countries, 1980-88

(Domestic and Foreign Merchandise, F.a.s.

(Millions of Dollars

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1987-88 Change $	1987-88 Change %
EXPORTS:											
World	41,757	43,814	37,010	36,456	38,230	29,619	26,619	29,135	37,593	8,458	29.0
Developed Countries	20,729	21,535	19,449	18,964	18,931	14,623	14,586	15,666	18,452	2,786	17.8
Canada	2,211	2,322	2,114	2,092	2,228	1,875	1,829	2,141	2,340	199	9.3
Japan	6,117	6,570	5,551	6,246	6,762	5,404	5,100	5,714	7,660	1,945	34.0
European Community	11,105	11,201	10,393	9,181	8,193	6,409	6,714	6,868	7,379	511	7.4
Other Developed	1,296	1,442	1,391	1,446	1,749	935	942	943	1,074	131	13.8
Developing Countries	14,836	16,155	13,050	14,643	14,939	12,409	10,902	11,787	15,591	3,804	32.3
Western Hemisphere	6,219	6,408	4,461	5,240	5,321	4,490	3,687	3,712	4,991	1,278	34.4
Mexico	2,503	2,438	1,159	1,945	2,039	1,692	1,098	1,212	2,265	1,053	86.9
Brazil	681	712	527	479	505	470	556	293	74	-218	-74.6
Other West Hemisphere	3,034	3,259	2,775	2,815	2,778	2,327	2,033	2,208	2,651	443	20.1
East Asia NICs	3,468	3,738	3,289	3,664	3,672	3,160	3,007	3,743	4,588	846	22.6
Other Developing	5,149	6,009	5,299	5,739	5,947	4,759	4,209	4,332	6,012	1,680	38.8
Centrally Planned Economies	5,077	5,147	4,006	2,560	3,990	2,348	1,037	1,605	3,342	1,737	108.2
China	2,210	1,956	1,498	546	615	149	66	370	759	390	105.4
U.S.S.R.	1,047	1,665	1,855	1,457	2,817	1,864	647	923	2,162	1,239	134.2
Eastern Europe	1,794	1,514	651	554	557	334	323	312	421	109	34.7
Transhipments	1,116	976	505	289	369	238	93	77	208	131	171.3
IMPORTS:											
World	17,446	17,182	15,714	16,533	19,772	19,994	21,224	20,687	21,206	519	2.5
Developed Countries	5,874	6,070	6,368	6,773	7,822	8,138	8,522	9,082	9,382	300	3.3
Canada	1,060	1,160	1,402	1,503	1,850	1,911	2,013	2,224	2,448	223	10.0
Japan	101	120	131	170	222	199	214	219	231	13	5.9
European Community	2,410	2,563	2,804	3,055	3,626	3,954	4,158	4,210	4,159	-52	-1.2
Other Developed	2,303	2,227	2,031	2,045	2,125	2,075	2,137	2,428	2,544	116	4.8
Developing Countries	11,174	10,544	8,992	9,367	11,545	11,435	12,240	11,072	11,277	205	1.9
Western Hemisphere	7,303	6,727	5,790	6,094	7,547	7,603	8,366	7,540	7,571	31	0.4
Mexico	1,078	1,125	1,169	1,264	1,291	1,447	2,032	1,875	1,825	-49	-2.6
Brazil	2,042	2,036	1,540	1,599	2,372	2,200	1,847	1,941	2,102	161	8.3
Other West Hemisphere	4,183	3,566	3,081	3,231	3,883	3,955	4,488	3,724	3,643	-81	-2.2
East Asia NICs	327	328	328	371	407	449	400	421	400	-21	-5.0
Other Developing	3,544	3,488	2,874	2,901	3,590	3,383	3,474	3,112	3,307	196	6.3
Centrally Planned Economies	398	568	355	393	405	421	462	533	547	14	2.7
China	136	333	175	172	193	199	200	240	280	41	17.0
U.S.S.R.	8	13	11	11	11	9	16	22	20	-2	-10.2
Eastern Europe	252	217	166	206	198	210	245	270	245	-25	-9.2
BALANCE:											
World	24,311	26,631	21,296	19,923	18,458	9,625	5,394	8,448	16,386	7,938	-
Developed Countries	14,854	15,465	13,082	12,191	11,109	6,485	6,064	6,584	9,070	2,486	-
Canada	1,151	1,162	712	589	379	-36	-184	-84	-108	-24	-
Japan	6,016	6,450	5,421	6,075	6,540	5,205	4,886	5,496	7,428	1,932	-
European Community	8,695	8,638	7,588	6,126	4,567	2,455	2,556	2,658	3,220	562	-
Other Developed	-1,007	-784	-640	-599	-377	-1,140	-1,194	-1,485	-1,470	15	-
Developing Countries	3,662	5,611	4,058	5,276	3,395	974	-1,338	715	4,314	3,599	-
Western Hemisphere	-1,084	-319	-1,328	-855	-2,226	-3,113	-4,679	-3,827	-2,580	1,248	-
Mexico	1,425	1,313	-9	681	747	245	-934	-663	440	1,103	-
Brazil	-1,361	-1,325	-1,013	-1,120	-1,867	-1,730	-1,291	-1,649	-2,028	-379	-
Other West Hemisphere	-1,149	-307	-306	-416	-1,106	-1,628	-2,454	-1,516	-992	524	-
East Asia NICs	3,141	3,409	2,960	3,293	3,264	2,711	2,607	3,322	4,189	867	-
Other Developing	1,605	2,521	2,426	2,838	2,356	1,377	734	1,221	2,705	1,484	-
Centrally Planned Economies	4,679	4,579	3,651	2,167	3,585	1,927	575	1,072	2,795	1,723	-
China	2,074	1,623	1,323	374	422	-50	-134	130	479	349	-
USSR	1,039	1,652	1,845	1,446	2,806	1,856	631	901	2,142	1,241	-
Eastern Europe	1,542	1,297	485	348	359	125	78	42	175	133	-
Transhipments	1,116	976	505	289	369	238	93	77	208	131	-

NOTE: Includes U.S. Virgin Islands trade with foreign countries except for 1980, and undocumented exports to Canada.

Table B.5

U.S. Trade in High-Technology Manufactures, by Product Group, 1987-88 1/
(Domestic and foreign exports, f.a.s.; General imports, customs value)
(Millions of dollars)

	1981	1982	1983	1984	1985	1986	1987	1988	1987-88 Change $	1987-88 Change %
EXPORTS:										
Total high-tech.....	60,390	58,112	60,158	65,510	68,425	72,517	84,071	104,280	20,209	24.0
Guided missles & spacecraft...	557	1,133	994	962	827	664	848	1,063	215	25.3
Comm. eqpt. & elec. components	11,392	11,803	12,363	14,425	13,472	14,893	17,758	21,462	3,703	20.9
Aircraft & parts.....	16,885	14,131	14,637	13,540	17,535	18,435	20,968	25,078	4,110	19.6
Office, computing & acctg mach	9,810	10,148	11,719	14,699	15,421	16,096	19,586	24,372	4,785	24.4
Ordnance & accessories.....	676	716	907	845	714	748	654	724	70	10.7
Drugs & medicines.....	2,220	2,329	2,564	2,672	2,724	3,136	3,258	4,042	784	24.1
Industrial inorganic chemicals	3,111	3,017	3,070	3,543	3,335	3,470	3,641	4,144	502	13.8
Prof. & scientific instruments	7,078	7,005	6,867	7,198	7,134	7,816	8,681	12,155	3,474	40.0
Engines, turbines & parts.....	3,831	3,601	3,016	3,234	3,127	2,757	3,024	3,818	794	26.3
Plastics & synth. resins, etc.	4,831	4,228	4,021	4,392	4,137	4,502	5,654	7,424	1,771	31.3
IMPORTS:										
Total high-tech.....	33,025	33,653	40,257	57,779	63,090	73,261	81,417	96,188	14,771	18.1
Guided missles & spacecraft...	0	0	39	226	124	168	48	52	4	8.7
Comm. eqpt. & elec. components	14,757	15,629	19,089	27,626	29,484	32,781	35,557	41,221	5,663	15.9
Aircraft & parts.....	3,638	3,295	2,632	3,659	4,692	5,745	5,783	6,224	441	7.6
Office, computing & acctg mach	2,940	3,739	6,167	10,028	10,580	13,491	17,383	20,563	3,180	18.3
Ordnance & accessories.....	169	174	136	197	246	349	372	430	59	15.8
Drugs & medicines.....	1,044	1,053	1,321	1,681	1,903	2,335	2,822	3,666	844	29.9
Industrial inorganic chemicals	2,332	2,237	2,508	3,127	3,069	2,860	2,800	3,577	777	27.8
Prof. & scientific instruments	5,605	5,321	5,932	7,636	8,633	10,447	11,240	13,627	2,387	21.2
Engines, turbines & parts.....	1,892	1,588	1,468	2,253	2,892	3,468	3,653	4,715	1,062	29.1
Plastics & synth. resins, etc.	648	617	965	1,346	1,466	1,617	1,760	2,113	353	20.1
BALANCE:										
Total high-tech.....	27,364	24,459	19,901	7,731	5,336	-744	2,654	8,092	5,438	-
Guided missles & spacecraft...	557	1,133	954	736	703	496	800	1,011	210	-
Comm. eqpt. & elec. components	-3,365	-3,826	-6,726	-13,202	-16,012	-17,889	-17,799	-19,759	-1,960	-
Aircraft & Parts.....	13,246	10,837	12,005	9,881	12,843	12,690	15,185	18,853	3,669	-
Office, computing & acctg mach	6,870	6,409	5,552	4,671	4,841	2,605	2,203	3,809	1,606	-
Ordnance & accessories.....	507	542	771	648	468	399	282	294	12	-
Drugs & medicines.....	1,176	1,276	1,243	991	821	802	436	376	-60	-
Industrial inorganic chemicals	779	779	563	416	266	610	841	567	-275	-
Prof. & scientific instruments	1,473	1,684	935	-438	-1,500	-2,631	-2,559	-1,472	1,087	-
Engines, turbines & parts.....	1,939	2,013	1,548	981	235	-711	-629	-897	-268	-
Plastics & synth. resins, etc.	4,183	3,610	3,056	3,045	2,671	2,885	3,894	5,311	1,417	-

1/ Based on U.S. Department of Commerce DOC-3 definition of high-tech products.
Source: U.S. Department of Commerce, ITA, Office of Trade & Investment Analysis.

Table B.6

U.S. Trade in High-Technology Manufactures, by Region, 1981-88 1/
(Domestic & foreign exports, f.a.s.; General imports, customs value)
(Millions of dollars)

	1981	1982	1983	1984	1985	1986	1987	1988	1987-88 Change $	1987-88 Change %
EXPORTS:										
World	60,390	58,112	60,158	65,510	68,465	72,517	84,071	104,280	20,209	24.0
Developed Countries	36,127	33,606	36,407	40,338	42,010	45,881	52,695	66,180	13,485	25.6
Canada	6,727	6,148	6,808	8,383	8,134	8,022	10,109	11,999	1,890	18.7
Japan	4,854	4,806	5,614	6,147	6,605	7,550	8,552	10,968	2,416	28.2
European Community	18,526	17,295	18,356	20,354	20,836	23,218	26,990	34,186	7,197	26.7
Developing Countries	20,352	19,457	19,032	20,677	20,618	22,001	25,418	32,047	6,629	26.1
Western Hemisphere	9,176	6,996	5,902	6,782	7,419	8,134	9,498	11,781	2,283	24.0
Brazil	1,212	967	919	855	1,258	1,549	2,035	2,375	340	16.7
Mexico	3,858	2,440	2,229	2,965	3,308	3,267	3,826	5,079	1,252	32.7
East Asian NICs	4,315	4,532	5,709	6,384	6,262	6,606	8,365	11,443	3,077	36.8
Centrally Planned Economies	962	747	790	951	1,856	1,419	1,591	1,900	309	19.4
U.S.S.R.	56	47	75	62	48	31	83	76	-7	-8.4
China	827	634	651	822	1,707	1,275	1,428	1,717	290	20.3
Eastern Europe	79	64	64	67	100	113	79	105	26	33.3
Special Category	2,949	4,302	3,929	3,544	3,815	3,216	4,367	4,153	-215	-4.9
Addendum: OPEC	3,686	4,392	3,348	2,946	3,114	3,104	2,413	2,947	534	22.1
IMPORTS:										
World	33,025	33,653	40,257	57,779	63,090	73,261	81,417	96,188	14,771	18.1
Developed Countries	23,013	23,038	26,513	39,338	45,231	52,271	54,762	62,318	7,556	13.8
Canada	3,607	3,389	3,491	5,109	5,354	5,828	6,353	7,450	1,097	17.3
Japan	10,426	10,930	13,959	21,431	24,434	28,652	29,673	33,244	3,570	12.0
European Community	7,323	7,024	7,378	10,566	12,837	14,974	15,816	18,104	2,287	14.5
Developing Countries	9,913	10,511	13,641	18,306	17,695	20,766	26,161	32,934	6,773	25.9
Western Hemisphere	2,587	2,464	3,130	4,043	4,017	4,515	5,462	7,203	1,741	31.9
Brazil	302	275	324	551	544	731	886	1,062	176	19.9
Mexico	1,775	1,785	2,184	2,734	2,891	3,290	4,147	5,467	1,319	31.8
East Asian NICs	5,318	5,675	7,889	10,769	10,746	13,181	17,084	21,033	3,950	23.1
Centrally Planned Economies	100	104	102	136	164	224	494	936	442	89.5
U.S.S.R.	15	13	14	4	5	4	16	15	-1	-6.9
China	42	53	57	93	109	157	423	861	438	103.4
Eastern Europe	42	36	31	39	50	63	54	60	6	10.3
Addendum: OPEC	56	80	89	132	46	61	42	61	19	45.7
BALANCE:										
World	27,364	24,459	19,901	7,731	5,336	-744	2,654	8,092	5,438	-
Developed Countries	13,114	10,568	9,894	1,001	-3,221	-6,390	-2,067	3,862	5,930	-
Canada	3,120	2,759	3,316	3,274	2,780	2,193	3,756	4,549	793	-
Japan	-5,572	-6,125	-8,345	-15,285	-17,829	-21,102	-21,121	-22,275	-1,155	-
European Community	11,203	10,271	10,977	9,787	7,999	8,245	11,173	16,082	4,909	-
Developing Countries	10,439	8,946	5,391	2,371	2,923	1,235	-743	-886	-144	-
Western Hemisphere	6,589	4,532	2,772	2,739	3,402	3,619	4,036	4,578	542	-
Brazil	909	692	595	304	714	817	1,150	1,313	163	-
Mexico	2,083	655	45	231	417	-23	-321	-388	-67	-
East Asian NICs	-1,002	-1,143	-2,179	-4,385	-4,484	-6,575	-8,718	-9,591	-872	-
Centrally Planned Economies	863	643	687	815	1,692	1,195	1,097	963	-133	-
U.S.S.R.	41	34	61	58	43	27	67	61	-6	-
China	785	581	593	728	1,598	1,119	1,005	857	-148	-
Eastern Europe	37	28	32	28	50	50	25	45	21	-
Special Category	2,949	4,302	3,929	3,544	3,815	3,216	4,367	4,153	-215	-
Addendum: OPEC	3,630	4,311	3,259	2,814	3,069	3,043	2,371	2,886	515	-

Note: Regional and country data exclude special category exports. 1/ Based on U.S. Department of Commerce DOC-3 high-tech definition. Source: U.S. Department of Commerce, ITA, Office of Trade & Investment Analysis.

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Table B.7

U.S. Current Account, by Major Component, 1977-88

(Billions of dollars)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Merchandise Trade:												
Exports	$120.8	$142.1	$184.5	$224.3	$237.1	$211.2	$201.8	$219.9	$215.9	$223.4	$250.3	$319.3
Imports	151.9	176.0	212.0	249.7	265.1	247.6	268.9	332.4	338.1	368.4	409.8	446.5
Balance	- 31.1	-33.9	-27.5	-25.5	-28.0	-36.4	-67.1	-112.5	-122.1	-145.1	-159.5	-127.2
Business Services:												
Exports	23.4	27.1	31.2	37.0	44.6	44.8	45.3	54.8	56.9	70.9	79.4	92.1
Imports	20.9	23.7	27.2	29.4	32.6	33.5	36.4	49.5	53.6	59.3	67.5	73.1
Balance	+2.5	+3.4	+4.0	-7.6	+10.2	+11.3	+8.9	+5.2	+3.4	+11.6	+11.9	+19.0
Other Goods & Services:												
Exports	7.9	8.6	7.0	8.7	10.6	12.6	13.0	10.5	9.5	9.1	11.8	10.7
Imports	6.8	8.5	9.5	12.1	12.9	13.9	14.3	13.4	13.9	14.8	16.0	16.6
Balance	+1.1	+0.1	-2.5	-3.4	-2.3	-1.3	-1.2	-2.9	-4.4	-5.7	-4.2	-5.9
International Investment Income:												
Receipts	32.2	42.2	64.1	72.5	86.4	83.5	77.3	85.9	88.8	88.6	104.7	107.8
Payments	14.2	21.7	33.0	42.1	52.3	54.9	52.4	67.4	62.9	67.0	82.4	105.5
Balance	+18.0	+20.6	+31.2	+30.4	+34.1	+28.7	+24.9	+18.5	+25.9	+21.6	+22.3	+2.2
Total Goods & Services:												
Exports	184.3	220.0	286.8	342.5	378.7	352.1	337.4	371.1	371.2	392.0	446.1	529.8
Imports	193.8	229.9	281.7	333.4	362.9	349.9	371.9	462.8	468.5	509.4	575.6	641.7
Balance	-9.5	-9.9	+5.1	+9.1	+15.8	+2.2	-34.5	-91.7	-97.3	-117.5	-129.5	-111.9
Net Unilateral Transfers	-5.0	-5.6	-6.1	-7.6	-7.6	-9.2	-9.8	-12.5	-15.4	-15.8	-14.2	-14.7
Current Account Balance	-14.5	-15.4	-1.0	+1.5	+8.2	-7.0	-44.3	-104.2	-112.7	-133.2	-143.7	-126.5

Note: Balances are calculated from unrounded values.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table B.8

U.S. Business Services Trade, by Component, 1977-88
(Millions of dollars)

	Total Business Services			Travel			Passenger Fares		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1977....	23,374	20,866	2,508	6,150	7,451	-1,301	1,366	2,748	-1,382
1978....	27,103	23,738	3,365	7,183	8,475	-1,292	1,603	2,896	-1,293
1979....	31,155	27,157	3,998	8,441	9,413	-972	2,156	3,184	-1,028
1980....	37,040	29,428	7,612	10,588	10,397	191	2,591	3,607	-1,016
1981....	44,643	32,644	11,999	12,913	11,479	1,434	3,111	4,487	-1,376
1982....	44,818	33,490	11,328	12,393	12,394	-1	3,174	4,772	-1,598
1983....	45,300	36,361	8,939	10,947	13,149	-2,202	3,610	6,003	-2,393
1984....	54,761	49,530	5,231	17,753	22,709	-4,956	4,015	5,910	-1,895
1985....	56,942	53,569	3,373	17,937	24,517	-6,580	4,388	6,671	-2,283
1986....	70,886	59,281	11,605	20,454	26,000	-5,546	5,546	6,774	-1,228
1987....	79,405	67,455	11,950	23,505	29,215	-5,710	6,882	7,423	-541
1988....	92,058	73,073	18,985	29,202	32,112	-2,910	8,860	7,872	988

	Shipping & Other Transp.			Royalties and License Fees*			Other Business Services		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1977....	7,090	7,972	-882	4,920	505	4,415	3,848	2,190	1,658
1978....	8,136	9,124	-988	5,885	670	5,215	4,296	2,573	1,723
1979....	9,971	10,906	-935	6,184	831	5,353	4,403	2,822	1,581
1980....	11,618	11,790	-172	7,085	724	6,361	5,158	2,909	2,249
1981....	12,560	12,474	86	7,284	650	6,634	8,775	3,554	5,221
1982....	12,317	11,710	607	5,177	617	4,560	11,757	3,997	7,760
1983....	12,590	12,222	368	5,277	723	4,554	12,876	4,264	8,612
1984....	13,809	14,843	-1,034	5,629	955	4,674	13,555	5,113	8,442
1985....	14,674	15,643	-969	5,995	891	5,104	13,948	5,847	8,101
1986....	15,458	16,715	-1,257	7,254	1,062	6,192	22,174	8,730	13,444
1987....	16,989	18,062	-1,073	9,070	1,365	7,705	22,959	11,390	11,569
1988....	18,930	19,641	-711	10,735	2,048	8,687	24,331	11,400	12,931

* Referred to as proprietary rights in the text.

Note: Surplus [+], deficit [-].

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business.

Table B.9

U.S. International Investment Income, by Component, 1977-88
(Millions of dollars)

	Total Investment			Direct Investment		
	Receipts	Payments	Balance	Receipts	Payments	Balance
1977....	32,179	14,217	17,962	19,673	2,834	16,839
1978....	42,245	21,680	20,565	25,458	4,211	21,247
1979....	64,132	32,960	31,172	38,183	6,357	31,826
1980....	72,506	42,120	30,386	37,146	8,635	28,511
1981....	86,411	52,329	34,082	32,549	6,898	25,651
1982....	83,549	54,883	28,666	21,381	3,155	18,226
1983....	77,251	52,376	24,875	20,499	5,598	14,901
1984....	85,908	67,419	18,489	21,217	9,229	11,988
1985....	88,832	62,901	25,931	33,202	6,079	27,123
1986....	88,615	66,968	21,647	38,533	5,379	33,154
1987....	104,703	82,420	22,283	54,754	9,500	45,254
1988....	107,776	105,548	2,228	48,264	16,748	31,516

	Other Private Investment			U.S. Government Transactions		
	Receipts	Payments	Balance	Receipts	Payments	Balance
1977....	10,881	5,841	5,040	1,625	5,542	-3,917
1978....	14,944	8,795	6,149	1,843	8,674	-6,831
1979....	23,654	15,481	8,173	2,295	11,122	-8,827
1980....	32,798	20,893	11,905	2,562	12,592	-10,030
1981....	50,182	28,553	21,629	3,680	16,878	-13,198
1982....	58,050	33,443	24,607	4,118	18,285	-14,167
1983....	51,920	28,953	22,967	4,832	17,825	-12,993
1984....	59,464	38,421	21,043	5,227	19,769	-14,542
1985....	50,131	35,516	14,615	5,499	21,306	-15,807
1986....	43,669	38,982	4,687	6,413	22,607	-16,194
1987....	44,638	48,868	-4,230	5,311	24,052	-18,741
1988....	52,840	59,746	-6,906	6,672	29,054	-22,382

Note: Surplus [+], deficit [-].

Source: U.S. epartment of Commerce, Bureau of Economic Analysis, Survey of Current Business.

Table B-10

Summary of U.S. International Transactions, 1977-88

(Billions of dollars)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Current Account Balance	-14.5	-15.4	-1.0	1.5	8.2	-7.0	-44.3	-104.2	-112.7	-133.2	-143.7	-126.5
Net Capital Flows:												
U.S. Assets Abroad	-34.8	-61.1	-64.3	-86.1	-111.0	-121.2	49.8	-22.3	-32.6	-99.7	-76.2	-82.1
Foreign Assets in U.S.	51.3	64.0	38.8	58.1	83.0	93.7	84.9	102.6	130.0	221.6	218.0	219.3
Net Capital Flows	16.5	2.9	-25.5	-28.0	-28.0	-27.5	35.1	80.3	97.4	121.9	141.8	137.2
SDR Allocations	-	-	1.1	1.2	1.1	-	-	-	-	-	-	-
Statistical Discrepancy	-2.0	12.5	25.4	25.3	18.7	34.4	9.2	23.9	15.3	11.3	1.9	-10.6

Note: Statistical discrepancy was formerly referred to as errors and omissions.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business.

Table B.11

U.S. International Investment Position, Selected Years, 1970-87
(Billion of dollars)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988p
NET POSITION											
Net Creditor (+) or Debtor (-).....	58.5	74.2	106.3	141.1	137.0	89.6	3.6	-111.9	-269.2	-378.3	-532.5
TOTAL ASSETS											
(U.S. Investment Abroad)	165.4	295.1	607.1	719.8	824.9	873.9	896.1	949.4	1,071.4	1,169.7	1,253.7
U.S. Government.....	46.6	58.0	90.5	98.8	108.5	113.3	119.8	130.8	138.0	134.3	133.3
Private.....	118.8	237.1	516.6	621.1	716.4	760.7	776.3	818.5	933.4	1,035.4	1,120.4
Direct Investment.....	75.5	124.0	215.4	228.3	207.8	207.2	211.5	229.7	259.6	308.0	326.9
Portfolio.....	20.9	34.9	62.7	63.4	75.5	83.8	89.1	112.8	133.2	146.7	156.8
U.S. Claims on Unaffiliated Foreigners Reported by U.S. Non-Banks.....	8.5	18.3	34.7	35.9	28.6	35.1	30.1	28.6	33.3	31.2	32.9
U.S. Claims Reported by U.S. Banks.....	13.8	59.8	203.9	293.5	404.6	434.5	445.6	447.4	507.3	549.5	603.8
TOTAL LIABILITIES											
(Foreign Investment in U.S.)	106.9	220.9	500.8	578.7	688.0	784.3	892.5	1,061.3	1340.7	1,548.0	1,786.2
Foreign Official Assets in U.S. ..	26.2	86.9	176.1	180.4	189.1	194.5	199.2	202.5	241.7	283.6	322.1
Private.....	80.8	134.0	324.8	398.3	498.9	589.8	693.3	858.8	1,098.9	1,264.4	1,464.1
Direct Investment.....	13.3	27.7	83.0	108.7	124.7	137.1	164.6	184.6	220.4	271.8	328.9
U.S. Treasury Securities.....	1.2	4.2	16.1	18.5	25.8	33.8	58.2	83.6	91.5	78.3	96.6
Portfolio.....	34.8	45.7	74.1	75.1	93.0	113.7	127.3	206.6	308.8	344.4	393.6
U.S. Liabilities to Unaffiliated Foreigners Reported by U.S. Non-Banks.....	8.8	13.9	30.4	30.6	27.5	26.9	31.0	29.4	26.6	29.4	35.5
U.S. Liabilities Reported by U.S. Banks.....	22.7	42.5	121.1	165.4	228.0	278.3	312.2	354.5	451.6	540.6	609.5

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Note: Detail may not add to totals due to rounding.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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